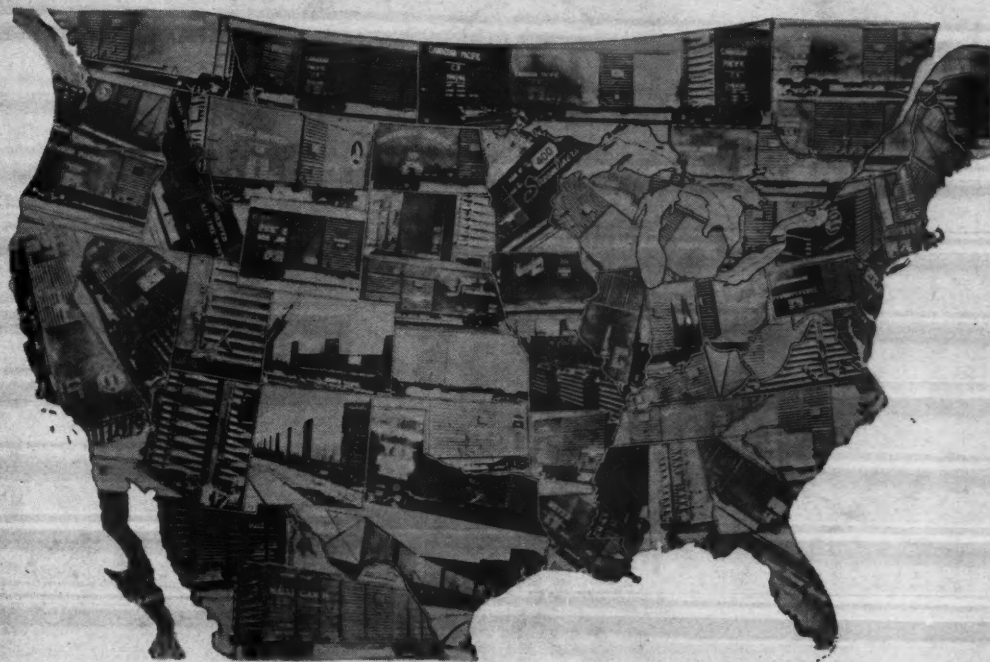


NOVEMBER 13, 1943

NOV 16 1943

Railway Age

Founded in 1856



Youngstown Steel Doors
and Sides continue to
safeguard precious lad-
ing the continent over.

YOUNGSTOWN STEEL DOOR COMPANY

Cleveland

Chicago

New York

Youngstown

SIX TESTS HAVE GUARDED THE QUALITY OF CHILLED CAR WHEELS ...NOW A 7TH HAS BEEN ADDED



AN INSTRUMENTAL HARDNESS TEST IS NOW APPLIED TO CHILLED CAR WHEELS

By applying the Brinell Hardness Test to Chilled Car Wheels, reliable *instrumental* hardness determinations now can be made to assure uniform wearing quality and increased resistance to failure. The new A.M.C.C.W. control test specifies both *maximum* and *minimum* limits of Brinell hardness.

With this new test added to A.M.C.C.W. control specifications, Chilled Car Wheels are showing increased freedom from failure and giving more service per unit of metal worn from tread.

Seven control tests guard Chilled Car Wheel quality:

1. Chill test block taken at least once in every ten wheels poured.
2. One complete chemical analysis block with each heat.
3. Constant pyrometer checks for accurate processing temperature.
4. Drop test of finished wheel (A.A.R. Specifications).
5. Thermal test of finished wheel (A.A.R. Specifications).
6. Test for perfect rotundity.
7. Brinell Hardness Test for maximum and minimum chill limits.

ASSOCIATION OF MANUFACTURERS OF CHILLED CAR WHEELS

230 PARK AVENUE,
NEW YORK, N. Y.

445 N. SACRAMENTO BLVD.,
CHICAGO, ILL.



Organized to achieve:
Uniform Specifications
Uniform Inspection
Uniform Product

3411

Railway Age

With which are incorporated the Railway Review, the Railroad Gazette and the Railway Age-Gazette. Name registered U. S. Patent Office.

Vol. 115

November 13, 1943

No. 20

PUBLISHED EACH SATURDAY BY THE SIMMONS-BOARDMAN PUBLISHING CORPORATION, 1309 NOBLE STREET, PHILADELPHIA 23, PA., WITH EDITORIAL AND EXECUTIVE OFFICES AT 30 CHURCH STREET, NEW YORK 7, N. Y. AND 105 W. ADAMS STREET, CHICAGO 3, ILL.

WASHINGTON 4, D. C.: 1081 NATIONAL PRESS BUILDING, CLEVELAND 13: TERMINAL TOWER SEATTLE 1: 1033 HENRY BUILDING, SAN FRANCISCO 4: 300 MONTGOMERY STREET, ROOMS 305-306. LOS ANGELES 14: 530 WEST 6th STREET.

SAMUEL O. DUNN, CHAIRMAN, HENRY LEE, PRESIDENT. ROY V. WRIGHT, VICE-PRESIDENT AND SECRETARY. F. H. THOMPSON, E. T. HOWSON, F. C. KOCH, R. E. THAYER, H. A. MORRISON, J. G. LYNE, H. E. McCANDLESS, VICE-PRESIDENTS. J. T. DeMOTT, TREASURER.

SAMUEL O. DUNN, EDITOR. ROY V. WRIGHT, MANAGING EDITOR. ELMER T. HOWSON, WESTERN EDITOR. JAMES G. LYNE, ASST. TO EDITOR. C. B. PECK, ALFRED G. OEHLER, E. L. WOODWARD, J. H. DUNN, R. A. DOSTER, H. C. WILCOX, NEAL D. HOWARD, CHARLES LAYNG, GEORGE E. BOYD, WALTER J. TAFT, M. H. DICK, JOHN S. VREELAND, C. MILES BURPEE, ARTHUR J. McGINNIS, J. L. STOVER, C. B. TAVENNER, H. E. MEASON. LIBRARIAN: EDITH C. STONE. EDITORIAL ASSISTANT: BETTY KETCHUM.

RAILWAY AGE IS A MEMBER OF ASSOCIATED BUSINESS PAPERS (A. B. P.) AND AUDIT BUREAU OF CIRCULATION (A. B. C.).

SUBSCRIPTIONS, INCLUDING 52 REGULAR WEEKLY ISSUES, AND SPECIAL DAILY EDITIONS PUBLISHED FROM TIME TO TIME IN NEW YORK OR IN PLACES OTHER THAN NEW YORK, PAYABLE IN ADVANCE AND POSTAGE FREE. UNITED STATES, U. S. POSSESSIONS AND CANADA: 1 YEAR \$6.00; 2 YEARS, \$10.00; FOREIGN COUNTRIES, NOT INCLUDING DAILY EDITIONS: 1 YEAR, \$8.00; 2 YEARS, \$14.00. SINGLE COPIES, 25 CENTS EACH. H. E. McCANDLESS, CIRCULATION MANAGER, 30 CHURCH STREET, NEW YORK 7.

In This Issue

Designing Car Equipment to Meet Post-War Competition..... Page 757

Rather than "allow railroads to fall into a dormant state of handling only business as usual" following the war, L. F. Etter, Pacific Electric Equipment Company, advises them on designs of facilities to economize handling of special merchandise, that all possible markets may be developed.

Non-ops Reject New Wage Award..... 759

With strike balloting in progress, 15 unions involved ask Congress to declare in favor of flat 8-cent increase—Vinson "sliding scale" proposal "wholly unacceptable"—Carriers support non-ops in acceptability of the 8-cent settlement.

How to Raise the Money to Build Super-Railroads..... 766

Since tax-built transportation is all in the "super" category, railroads need to become "super" too, in order to hold their own in competition—John Barriger in this article discusses how they may do this and, especially, where they can get the necessary capital.

EDITORIAL COMMENTS

"You Can't Take It With You".....	753
Railroaders at War.....	754
Mechanical Associations Keep Up Their Activities.....	754
Why Continue to Haul Commuters at a Loss?.....	755
"Dormant" Scrap.....	755
Labor Turnover.....	756

GENERAL ARTICLES

Designing Car Equipment to Meet Postwar Competition.....	757
Non-ops Reject New Wage Award.....	759
Maintenance Officers Ponder the Serious Shortage of Help.....	763
How to Raise the Money to Build Super-Railroads.....	766

RAILROADS' RECORD IN 1944 DEPENDS ON MATERIALS ALLOTTED..... 770

RAILROADS-IN-WAR NEWS..... 772

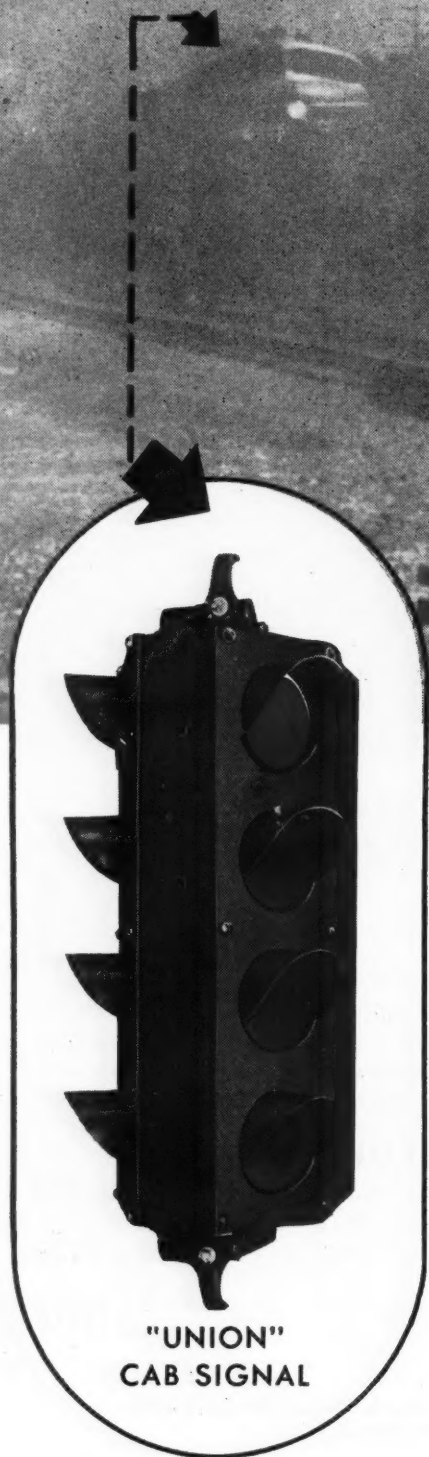
GENERAL NEWS..... 775

The Railway Age is indexed by the Industrial Arts Index and also by the Engineering Index Service



PRINTED IN U. S. A.

DISPEL the FOG . . .



. . . with the signal that rides in the cab!

IN the many territories where FOGS are prevalent, Nature places one of her worst handicaps on efficient rail transportation . . . obscuring tracks and wayside signals . . . slowing down traffic . . . and causing congestion!

Under such adverse weather conditions, "Union" Cab Signals provide the most effective means of operating trains with safety. They ride in the cab in full view of the engineman. They are continuously controlled to reflect instantly changes in track conditions ahead, regardless of train position in the block. They expedite train movements, facilitate "on-time" performance and provide the most modern type of protection for high-speed train operation on either steam or electric roads.

A close study of train performance under adverse weather conditions will reveal the benefits to be gained from cab signals. Why not call upon our nearest District Office for complete information about these modern signals that ride in the cabs?

UNION SWITCH & SIGNAL COMPANY

SWISSVALE, PA.

The Week at a Glance

WHY EMPLOYEES QUIT: If the railroads could cut down, even just a little, the number of "quits" among their employees—and keep up the present rate of "hires"—they would, probably, soon have plenty of help. This suggestion is made in an editorial herein, and is further elaborated upon in an article on page 763. Foremen who have never been taught to handle men skilfully—who haven't learned "how to be firm and decent at the same time"—are suspected as the principal cause of exits from the service; and foremanship training, widely adopted in industry and on some railroads, is suggested as a solution. Another proposal is "exit interviews", whereby reasons for every "quit" are ascertained; so a carrier gets positive information, replacing guess-work, on conditions which must be corrected to induce the help to stay.

STOP WATCH ON CONGRESS: The non-ops want their raise to be a straight 8 cents an hour for lower-paid and higher-paid alike. They'll have no truck with Stabilizer Vinson's idea of taking almost the same amount of money away from the railroads and dividing it up so the lowest-paid get 10 cents more, and on down to only 4 cents more for the higher brackets. The non-ops propose to pull the pin on Vinson by persuading Congress to enact a joint resolution holding the agreement between the carriers and the non-ops for an 8-cent raise to be in accord with the law of the land. To assist the deliberations of the lawmakers in the desired direction the non-ops are proceeding with their strike vote, although George Harrison assured the National Legislature that it would be granted the time necessary for its machinery to function as instructed, before the unions actually immobilize the country.

MONEY FOR MODERNIZATION: Everybody who has been pained by the sight of a tortuous, single-track, unsignaled railroad paralleled by a modern highway realizes how uneven is the competition when a 1900 railroad is pitted against a 1943 product of the road-builders' art. But how can all main-line railways be made as modern as all main highways—when the railroads have to find private capital for their improvement, while a plenteous, not to say profligate, public purse streamlines all the highways? A deep student of railroad operation, engineering and finance addresses himself to this question on page 766 herein—and offers some persuasive answers.

JUSTICE OR COERCION?: Of the Administration's present corral of wage adjudicators, mediators, and go-betweens, Dean Wayne Morse (as your reporter's memory serves) was the first one to suffer the now orthodox Administration treatment of the men it names to sit in judgment in wage cases. Dean Morse, it will be recalled, having brought in a decision in the 1941 railway wage case which the unions repudiated, was given the extra-judicial job of, in effect, revising his finding until

he produced something the brothers would accept. But, if the Dean were the first member of the wage bench who took the hint that justice in such cases should be tempered to the will of one of the litigants, he has also been the first, at length, to protest such a way of doing business. He was the only member of the War Labor Board who voted adversely to eating its former findings against John Lewis, and against approving the miners' wage increase agreed to by Secretary Ickes. Dean Morse says the majority findings in this case "place a great strain on the ordinary conception of government by law."

A YARDSTICK ON WALLACE: A reputed pietist in high public office has recently used his position to megaphone calumnies against the railroads. These carriers, so asserted this hierarch of humanitarianism, have been "draining the people dry" by "exacting unconscionable charges," all for the benefit of "Wall Street". The leading editorial herein compares the work the railroads did in August, 1943, with that of August, 1929, and their comparative "exactions" therefor—enabling the reader quickly to appraise to what degree the railroads are overcharging their customers and overpaying "Wall Street", or vice versa.

EXACTORS OR EXACTEES?: The railroads in August, 1943, performed 56 per cent more freight service and 173 per cent more passenger service than in August, 1929—but they "exacted" only 31 per cent more for the heavier burden of freight they moved and 92 per cent more for almost thrice the load of passengers. The average charge per unit of freight service was 16 per cent less than in 1929 and the average charge per passenger-unit was reduced 29 per cent, which reductions saved \$177 millions to the people Mr. Wallace asserts are being "drained." Furthermore, the railroads paid 40 per cent higher average compensation to employees, and 400 per cent more taxes. The share remaining for "capital" was 12 per cent less than in 1929. What other class of Americans except "capital" (or "Wall Street" or "robber barons"—any opprobrious name will do for those scalawags who put up the money to build the railroads and keep them equipped and supplied) is now doing over 60 per cent more work for total wages 12 per cent lower than in 1929?

WHO WROTE THE SPEECH?: The Transportation Association of America has widely distributed a circular, critical of the Vice-President's attack on the railroads and his "distorted" interpretation of the public interest in transportation—in which they express doubt that Mr. Wallace composed his utterances. The Association, as recorded in the news pages herein, asserts that the Vice-President "offers no solution whatever to the transportation problem", but "contents himself with misrepresenting the proposals of those who are honestly striving to find some way out of a bad situation".

COMPULSORY BIDDING: Forced sale at a public auction is not the means by which a seller may usually expect to secure the highest prices for his goods—unless, perhaps, what he is offering is a standard commodity for which there is always a lively demand and an active market. Such in substance, is the reasoning presented to the I. C. C. by John Dickinson for the carriers who are opposing compulsory public auctions as the sole means of marketing railroad securities—as reported in the news pages herein. The only railroads supporting compulsory sales to the highest bidder are the C. & O. and its affiliated lines.

MISPLACED BENEFICENCE?: The diminishing public need and enthusiasm (as shown by traffic figures) for the philanthropy tendered by the railroads in the form of below-cost "commuter" service raises the question whether the carriers might not better shift such fare benefactions to quarters where greater popular response could be expected. An editorial herein draws attention to the increasing difficulty which privately-financed transportation is encountering in an area so heavily inundated with tax money—and suggests that all such transit should be made self-supporting, or none can indefinitely remain so.

ARMY RAILROADS' WORK: The military railroaders, who took over a large share of the operation of the railways in North Africa, increased the capacity of those lines by 70 per cent—improving by that much the supply position of the allied forces. Over Persian railways, manned and brought up to their present capacity by Americans, are passing about half of the allied supplies to Russia. These and other notable accomplishments of the Army railroaders were revealed this week by General Gross in a radio address reported briefly in the news pages herein.

CARS WITH SHIPPER APPEAL: Ingenious engineering by the railroads, to adapt car equipment to the shippers' needs, can accomplish two highly desirable results—(1) satisfied customers, not looking longingly at the offerings of rival transport agencies and (2) heavier loads per car, not only increasing profitability of the traffic, but affording opportunities for more attractive rates, if these are needed to clinch the business. Such are samples of many commercially-helpful suggestions contained in a paper in this issue, by L. F. Etter of the Pacific Railway Equipment Company.

FREIGHT RATES STAY PUT: There will, it seems, be no general increase in freight rates—at least until next July. Recently the I. C. C. asked the carriers to "show cause" why the suspension of the increases should not continue another six months—and the railroads said, in effect, that, for the time being, they wouldn't object to present rates.

for **THIS** battle, G. H. Q.

★ Here's how you—yes, **YOU**—can carry out a smashing "pincer movement" against the Axis. Swing in on one flank with increased production of war goods! Drive in on the other with redoubled purchases of War Bonds through your Pay-Roll Savings Plan!

You're an officer in both of these drives. Your personal leadership is equally vital to both. But have you followed the progress of your Pay-Roll Savings Plan as closely as you have your production?

Do you know about the new Treasury Department quotas for the current Pay-Roll Allotment Drive? *Quotas running about 50% above the former figures?* You see, these new quotas are based on the fact that the armed forces need more money than ever to win the war, while the average worker has more money than ever before to spend. Particularly so, on a *family income* basis—since in so many families several members are working, now.

Remember, the bond charts of today are the sales curves of tomorrow! Not only will these War Bonds implement our victory—they'll guard against inflation, and they'll furnish billions of dollars of purchasing power to help American business re-establish itself in the markets of peace.

So get this new family income plan working at once. Your local War Finance Committee will give you all the details of the new plan. Act today!



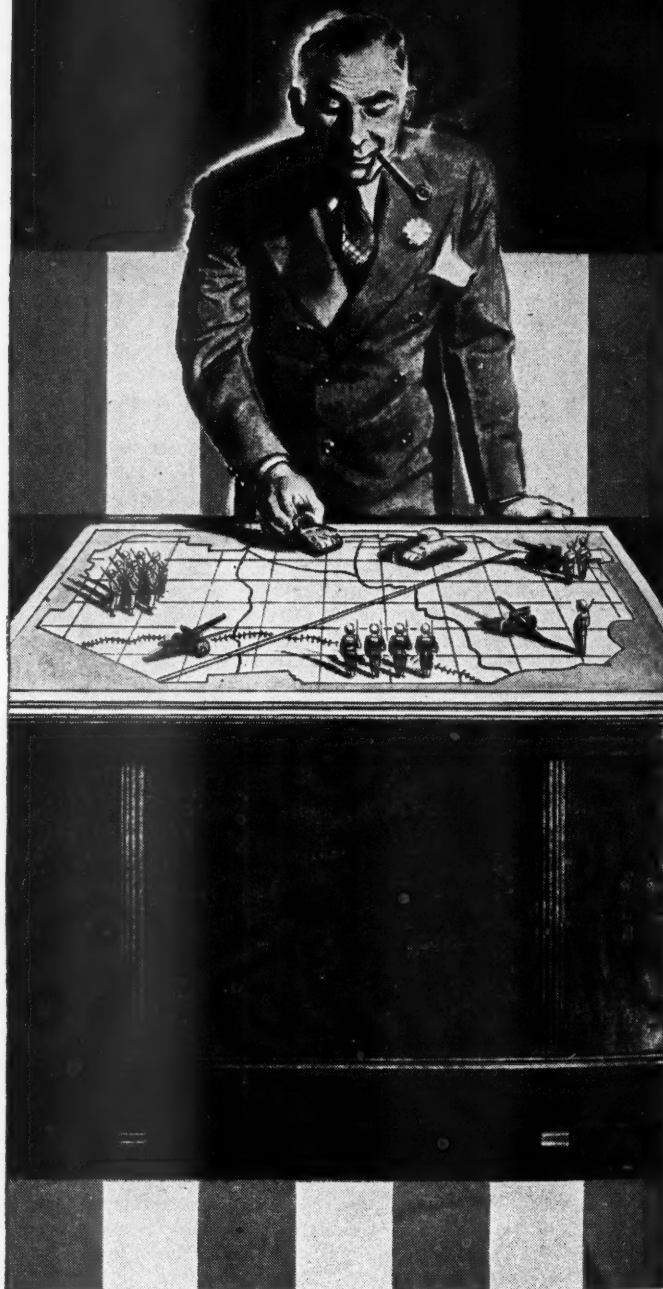
This advertisement prepared under the auspices of the War Advertising Council and the U. S. Treasury Department.

LET'S KEEP ON Backing the Attack!

This Space is a Contribution to America's All-Out War Effort by

RAILWAY AGE

is at **YOUR** own desk!



RAILWAY AGE

"You Can't Take It With You"

Virtually complete statistics for August, which recently have been issued by the Interstate Commerce Commission, tell an interesting, enlightening and almost up-to-date story of what is occurring on the railways. Their significance can best be made clear by comparing them with statistics for August, 1929, the railways' most profitable pre-war year.

The railways rendered 56 per cent more freight service and 173 per cent more passenger service in August, 1943, than in August, 1929. Their gross earnings increased only 36½ per cent, however, because revenue per ton-mile was 16 per cent less and revenue per passenger-mile 29 per cent less. However, gross earnings exceeding \$800 million in August, 1943, were the largest in any month in history prior to October, 1943, for which results have not yet been reported.

Payroll figures for August are not yet available. Probably, however, they will be about the same as for July, when average monthly pay per employee of \$205 was \$59, or 40½ per cent, greater than in 1929. In July, 1929, \$251 million compensation was paid to 1,720,144 employees. In July, 1943, \$285 million was paid to 1,391,000 employees—a decrease of 19 per cent in employees, but an increase of 13½ per cent in total pay.

In spite of the huge increase in traffic, and of the 40½ per cent increase in average wage, operating expenses of \$467 million were only 18 per cent larger than in August, 1929. Consequently, after payment of equipment and joint facility rentals, net earnings from operations increased from \$180 million to \$316 million, or almost 76 per cent. But, like so many, the railways are now working principally for the government. Their taxes increased from \$38 1/3 million in August, 1929, to almost \$192 million in August, 1943, or 400 per cent. Hence, net operating income declined from \$142 million to less than \$125 million.

The railways' increase in gross earnings in August, 1943, over August, 1929, was \$213 million. Here is where it went: Increase in

Railway Results in August 1929, and 1943

	August 1929	August 1943	Increase or Decrease	Per cent Increase or Decrease
Total operating revenues	\$587,322,413	\$800,232,733	+\$212,910,320	+ 36.5
Freight revenue ..	446,609,835	585,743,662	+139,033,827	+ 31.1
Revenue per ton-mile	1.035¢	0.914¢	- 0.121¢	- 11.8
Passenger revenue	\$ 84,315,156	\$161,971,338	+\$ 77,656,182	+ 92.1
Revenue per passenger-mile	2.64¢	1.870¢	- 0.776¢	- 29.3
Total operating expenses	\$396,204,945	\$467,287,517	+\$ 71,082,272	+ 17.9
Ratio Operating Expense to Revenues ..	67.5	58.4	- 9.1	- 13.5
Equipment and Joint Facility rentals ..	\$ 10,908,038	\$ 16,663,066	+\$ 5,755,028	+ 52.8
Net Earnings from operations	180,109,430	316,232,150	+136,122,720	+ 75.6
Taxes	38,371,255	191,720,660	+153,349,405	+400.00
Net operating income	141,758,499	124,561,490	- 17,197,009	- 12.1
Compensation of employees (July)	\$251,071,312	\$285,051,078	+\$ 33,979,696	+ 13.5
Number of employees (July)	1,720,144	1,390,890	- 329,254	- 19.1
Avg. compensation per employee (July) \$	146	205	+\$ 59	+ 40.4

wages, about \$34 million; increase in other expenses, about \$37 million; increase in rentals, \$6 million; increase in taxes, \$153 million; decline in net operating income, \$17 million. The increase in taxes took almost half of the increase in gross earnings. The increases in taxes and wages combined took 88 per cent of it.

But the tax-collecting government and railway employees were not by any means alone in benefitting by railway results in August, 1943, as compared with August, 1929. The public benefitted not only by the huge increase in service for military and civilian purposes rendered, but also by the reductions in rates. If revenue per ton-mile

Efficiency
FOR VICTORY

and per passenger-mile had been as high as in August, 1929, the public would have paid the railways \$177 million more in August, 1943, than it did—\$110 million more for freight transportation and \$67 million more for passenger transportation.

A few years ago there was a popular play, entitled, "You Can't Take It With You." After having in August saved the public \$177 million in rates, paid a 40 per cent increase in average wage and a 400 per cent increase in taxes, got a 12 per cent reduction in their net operating income, and been lambasted by Vice-President Wallace and other agitators for innumerable sins of omission and commission, the railways should know what the title of that play means.

Railroaders at War

The ranks of the Military Railway Service are filled with railroaders and the far-flung battalions of this service on all the fighting fronts are staffed by railway officers. No industry has gone farther in the relinquishment of men to the armed forces. There are railroaders wherever there are United States troops and that covers a tremendous amount of territory. As a matter of fact, the railways were prepared as no other industry was, since these railway battalions were organized many years before the war, in anticipation of the pressing need for this type of special duty which eventually developed.

The railways have gone ahead uncomplainingly, but when the situation arrives at a point where one railway alone, in a crucial area, is short nearly 10,000 men, the time has come to re-examine the situation in the light of hard facts. These manpower shortages have developed in spite of the spending of millions of dollars by the railways to replenish their depleted ranks and to try out every scheme that has emerged from Washington.

The situation is crucial everywhere, but it is particularly bad in the West, where there are a number of important towns in which the railway is the sole industry and which have little or no surrounding population to draw from. In one such instance, 94 per cent of the quota supplied by one draft board consisted of railway men. What this did to the efficiency of the yards and shops at this terminal may well be imagined. For a time it produced virtual chaos and the adverse effects are still being felt.

Some draft boards take an enlightened view of the situation and, realizing the railways' predicament, do all that they can to assist. Other draft boards are completely unco-operative, including the classic example, on one of the busiest lines in the country, when the railways asked deferment for a dispatcher. "Why," said the board, in refusing the request, "you can easily make a dispatcher in six months!"

Draft boards vary widely in their interpretations of the profuse instructions that are given to them, but the fault lies only incidentally with such local boards.

They are constantly being driven to fill their quotas. It is from the top only that the relief can come from what is becoming an impossible situation. If new rules, based upon an enlightened appreciation of the crisis that exists, are not forthcoming soon, the railways simply cannot continue to produce the truly magnificent transportation output which has been so vital to the war effort.

It must be realized also that the removal of an experienced key man from a railway job not only hampers the effort from the standpoint of efficiency, but, unlike any other industry, it also establishes a menace to public safety, for railroaders are directly charged with the lives of passengers, including vast numbers of troops. A depleted staff, imperfectly filled out with inexperienced men, sets up a hazard that should not be created except in the last step of a national emergency and danger. Through unstinting co-operation, the railways have stripped themselves to the bone, so far as manpower is concerned. The time has come when there are no more men available in the operating, maintenance, mechanical and signaling departments whose loss will not be felt keenly. A halt must be called somewhere—and the time has arrived.

Mechanical Associations Keep Up Their Activities

For the second year in succession the four so-called Co-ordinated Mechanical Department Associations have been forced to omit their annual conventions because of war conditions. The members of three of these associations, however—the Car Department Officers', the Master Boiler Makers' and the Railway Fuel and Traveling Engineers'—believe so strongly in the importance and value of their work that their committees have continued to function and reports have been assembled for their published proceedings, thus making it possible to hold a second series of "Conventions-in-Print" in the columns of the "Railway Mechanical Engineer". The fourth association, the Locomotive Maintenance Officers', very largely discontinued its committee work, but sponsored a series of "round-table" discussions in that publication on six topics of special interest to its members under the present emergency conditions.

It is well that the work of these associations is being so actively and aggressively carried on. The addition of many new and inadequately trained workers, the necessity of applying unusual ingenuity and administrative ability to overcome the manpower, material and equipment shortage handicaps, and the necessity for special training for the supervisors—many of them newly promoted—have made it all the more important that the mechanical associations should carry on their activities, since they are, in effect, clearing houses on up-to-date information and practices, as well

as an inspiration to their members. Their determined stand to be of help in the emergency promises well for their future progress and further development.

It would appear that one of the great lessons that the railroads are learning from the emergency conditions under which they have been functioning during the past two years, is the importance and value of providing special training and refresher courses for the members of their supervisory staffs; the work of the various associations dovetails with and supplements such efforts.

Why Continue to Haul Commuters at a Loss?

Metropolitan urban areas with large local passenger traffic should, before long, be asked to make up their minds whether the movement of this traffic is an economic service, to be paid for by the passenger at rates covering all costs; or, whether, on the other hand, this kind of passenger service—either by rail, trolley or highway—is one of the “social gains” which are to be a permanent charge on general taxation.

Transit facilities now provided for this traffic comprise two distinct types (from the standpoint of who pays the bill), viz. (1) privately-owned transit lines and railroads, on the one hand, and, on the other, (2) highway transportation and publicly-owned transit lines. Most persons regard transportation by bus or automobile as a self-supporting private undertaking—essentially equivalent to trolley lines or suburban railroad lines. Actually, of course, in the case of motor transportation, the private operator owns only the vehicles; by far the greater proportion of the plant which yields the service is the highway, which is built and maintained by taxation. The users of the highways pay “taxes” but such levies do not in the aggregate defray all highway costs—and, except in the few instances where tolls are collected, operators of vehicles which use particularly expensive stretches of highway (such as most of those in the vicinity of large cities) are assessed no more than those of vehicles “out in the sticks” who enjoy no such costly facilities.

Publicly-owned rail transit (particularly in the New York area) is not essentially different, in principle, from highway transportation everywhere. That is, receipts from users do not cover its costs—and proportionate extra charges are not exacted from those who enjoy the services of particularly expensive installations. Furthermore, no *ad valorem* taxes are levied on fixed property; and heavy capital expenditures for additions and betterments continue to be made, regardless of the fact that these outlays will not bring compensatory increase in revenues, and that past capital expenditures have been similarly unproductive.

With privately-owned transit and railway suburban

lines, the case is quite different. Here, no tax contributions defray roadway capital and maintenance costs; instead, heavy *ad valorem* taxes are levied on the property. Under such unequal conditions, as between privately-owned and public transportation facilities, it is not to be wondered that the former have been withering away; or, at best, have remained stationary, while public-owned transportation, not having to pay its own way, has developed on an unprecedented scale.

Most of the suburban trolley lines, with no Santa Claus to meet their deficits, have either folded up, or their operators have shifted to the bus business—where they are freed from capital expenditures and *ad valorem* taxes on their roadway. The railways, on the contrary, are, except in a few instances, continuing to operate their suburban services, subsidizing it with earnings from their through traffic.

Despite an average rate of only a little more than one cent per mile, suburban traffic on the railroads in 1940 (choosing that year to eliminate the influence of the war) was 20 per cent less than in 1932. Meantime, however, through passenger business (yielding a revenue per passenger-mile in 1940 almost double that of the commuter business) increased 65 per cent from 1932 to 1940.

It is evident, therefore, that, notwithstanding the heavy contribution which the railways' profitable traffic is making to sustain suburban passenger service, this latter remains a moribund business—for the obvious reason that private resources cannot compete with the public purse. Superhighways in urban areas continue to expand and improve—and there is little reason to assume cessation, in peace times, of a continuance of such expansion. Mass transportation of commuters by rail is intrinsically more economical than moving them in retail lots by automobile or bus, but it is not a social economy which the railroads can definitely continue to sustain, at the expense of their remunerative business, against the apparent determination of public policy to use tax funds without limit to divert the traffic to less economical channels.

“Dormant” Scrap

With the railway drive for ferrous scrap now in its full stride, it is apparent that “dormant” scrap is the principal hope for increasing production. Dormant scrap in and around storehouses, shops, and along the right of way comprises obsolete machinery, tools, dies, jigs, fixtures and other equipment for which there is no immediate or future use. It comprises items that are broken, worn beyond repair, abandoned, dismantled, or in need of replacement parts that no longer can be obtained.

Today's definition of dormant scrap includes a far greater variety of items than it would in peacetime. The national call for metal suggests the scrapping of both fabricated and semi-fabricated goods which have

long been held in inventory against the day when some call might be made for them. A list of railway ferrous materials that fall in the dormant class would fill many pages. Among these are: steel floor plates and gratings, abandoned fire escapes, broken work benches, old furnaces and their grates, storage bins, shelving, pulleys, shop and office partitions, parking-lot rails and fences, outdated moulds, old ventilating equipment, and idle line shafting.

Now is the time to put inventory and property records to work; their close examination may provide good clues to otherwise forgotten dormant scrap. The search for obsolete machinery and other dormant scrap must be pushed into every part of the railway plant, from rooftop to basement, in out-of-the-way places as well as the more open areas of buildings. Thorough exploration of the innumerable sources on a property involves not only considerable clerical work but considerable leg work as well.

A plan that has been used successfully in manufacturing plants provides the foremen of all departments with brightly colored tags to be attached to any item whose production usefulness is questionable. Each foreman distributes the tags to the workers in his gang, with instructions to tag any item which he believes would be more valuable to the nation as scrap than to the company in its present capacity, and then report the item to a member of the scrap or salvage committee.

Similar tags have been used in stores departments to promote the prompt identification, collection and movement of other dormant and obsolete material and equipment. This plan, together with periodic studies of inventory records, has been used in one plant to remove old or obsolete items to a segregated area termed the "slow-moving storeroom." Whenever a worker requires a new tool he tries first to get it at this storeroom. A follow-up system reveals the items that remain in stock too long and the list is submitted to the officer in authority for decision as to whether they may be scrapped.

Such procedure prevents the accumulation of any large amount of obsolete material and brings to light certain items that may be converted to some useful purpose before their age otherwise would relegate them to the scrap pile.

Labor Turnover

If the railways expect to make real headway in meeting their needs for essential employees under the conditions that prevail today and which promise to continue until the end of the war, they must take more aggressive steps than they have to date to plug the leak that is occurring through heavy turnover in their forces. In an address before the recent war-time conference of the American Railway Bridge and Building Association, which is abstracted in this issue, Edwin

M. Fitch, assistant director, Division of Transport Personnel, O. D. T., called this leak the "Number One phase of the manpower problem of the railways," but pointed out that if turnover can be reduced by even rather small percentages on the average, and the present rate of new hiring continued, there should be little labor shortage in the railway industry, except in the most critical areas of the country.

Obviously, it will avail the railways little to continue to add thousands of men to their payrolls monthly while losing nearly as many for various reasons. While the numbers may increase gradually, the net result may well be on the debit side through the necessity for replacing experienced or partially trained employees with new men, boys and women with little or no knowledge of railroad work. In fact, in view of the gradual depletion of the labor market to the point of exhaustion in many areas, it is not inconceivable that, unless restrained by suitable measures, "quits" from railway work will exceed new "hires," causing the further deterioration of a situation that has already become serious, if not critical, in many parts of the country, especially with regard to maintenance of way employees.

In his address before the bridge and building officers, Mr. Fitch suggested three means of reducing turnover. Based on widespread reports, he attributes a high percentage of turnover to unsatisfactory relations between workers and their foremen, and every railway officer, from his own experience, knows that there is at least some justification for this assumption. To overcome this cause, he stressed the importance of training foremen in the art of handling men.

Second, he emphasized the importance of "exit interviews," something entirely new to most railroads, with definite responsibility assigned to specific supervisory officers on each division staff for interviewing every man who gives notice of his intention of leaving railway service. In addition, he referred to unsatisfactory housing conditions, which in some localities are making it difficult for the railways to keep men on the job.

In an emergency for essential labor such as faces the railways, with many drains on their forces entirely beyond their control, these are timely suggestions. Few will question that many foremen who are skilled in the technique of railway work are far from skilled in the technique of handling men successfully. Few will question also that many men with real or fancied grievances can be held in railway service by a satisfactory outlet for their complaints. Furthermore, it is a known fact that inadequate or otherwise unsatisfactory housing conditions have been the source of considerable labor turnover on the railways, especially among the maintenance of way forces, in spite of attempts by many roads to make improvements.

Knowing such facts as these will avail the railways little unless they act upon them more aggressively than they have in the past.

Designing Car Equipment to Meet Postwar Competition*

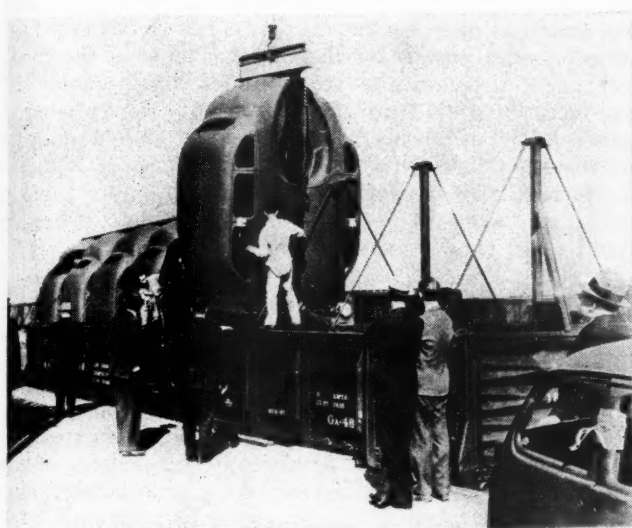


Fig. 1—Gondola Car with Special Fixtures for Loading Automobile Bodies



Fig. 2—Similar Fixtures for Automobile Body Loading in Box Cars

Special facilities needed to help railroads retain some merchandise lading

By L. F. Etter

Pacific Railway Equipment Company

WHEN the war ends and railroads are faced with the potential competition which is being developed during the war, they will be confronted with the task of making railroading the most economical means of transportation in as many ways as possible. The "most economical means of transportation" does not mean in cents per mile or ton-mile only; services rendered with respect to time enroute and minimum loss and damage have a part in economical transportation.

Consider the types of business which will be open to the railroads after the war. The old standby is the long haul. Although it has been a foregone conclusion that this business belongs to the railroads, they must go after it in an aggressive manner and see to it that, through efficient service and operation, this business remains theirs.

Another objective for the railroads is the development of a healthy and dependable passenger business. There was a time when the passenger business was taken for granted by the railroads even to the point where they ignored it. It took the competition of the motor buses and the airlines, with the resulting loss of traffic to show what the passenger business really meant.

The third class of business open to railroads, one in

which they should make it a point to participate actively, is the handling of special merchandise. Examples are perishable foods, live stock, automobile and aircraft parts, and machinery. It seems that whenever special equipment or special cars are mentioned to a railroad man it makes him very nervous; he immediately visualizes automobile cars standing idle during off seasons and airplane-wing-section cars full of fixtures which prevent use of the car for anything else. Specifically, the following problems are present when designing special cars for shipping: (1) The need for flexibility of equipment giving as unlimited use of the car as possible; and (2) each type of shipment may be an engineering problem in itself and require development by a competent engineering staff. There are certain definite reasons why the railroads should go after this business: (1) The business is of considerable value and is not to be ignored; (2) this type of business forces the railroads to maintain an active equipment engineering staff which almost unconsciously serves as a market investigating bureau as it looks into the adaptability of various products to efficient transportation by rail. This tends to promote a constant improvement in railway equipment and not allow the railroads to fall into a dormant state of handling only business as usual; and (3) the development of special shipping cars forces the railroad freight departments to make early contacts with manufacturers and work out shipping problems as the products are being developed. By doing this, and having time to work out the most desirable method of shipping by rail, it is fairly certain that, when the products are in real production,

* An abstract of a paper sponsored jointly by the Railroad Division of the American Society of Mechanical Engineers and the Pacific Railway Club and presented at the semi-annual meeting of the Society on June 15 at the Biltmore Hotel, Los Angeles, Calif.

they will be shipped by rail. Willingness and effort in tackling these shipping problems will not only tend to keep the railroads aware of possible markets but will win shippers' confidence in able, efficient, and economical transportation by rail.

The use of cars to haul special merchandise is illustrated by those designed to carry automobile bodies. Fig. 1 shows a gondola car with special loading fixtures for auto bodies. The bodies are bolted to either side of a frame which is then lifted by crane, dropped into place, and locked. Sixteen bodies can be loaded in a car. Fig. 2 shows a house car employing much the same idea. The bodies are fastened to the frames before they are brought into the position shown. Eighteen bodies are loaded per car in this manner. There are two advantages in this method over gondola loadings. In the gondola car the bodies are shipped without the final coat of paint; in the closed car the final coat of paint is well protected. The load should ride much better in the box car as the actual load more nearly approaches the car capacity. Static deflection of the springs of the car is greater than in the high-capacity gondola and, consequently, better riding qualities are

obtained. The advantage of such equipment is apparent to both the railroad and the shipper. The time of loading and its cost to the shipper, which might reduce his interest in shipping by rail, is only a fraction of what it would be either to crate the bodies or block them with wood. It might appear that the railroad is reducing its car availability and hauling considerable non-revenue weight, these fixtures being considered a part of the car light weight. However, the advantages to the railroad are: (1) Competition has been met and business has gone to the railroad since it has provided an economical means for the transportation of the product; (2) although the steel frames are probably 30 per cent heavier than the crating or wood blocking which might ordinarily be used, and are considered part of the car's light weight, they have increased the payload; and, (3) the increased number of units per car and the saving in loading and unloading time have freed other cars for revenue business.

The "All-Purpose" Box Car

There have been several attempts in the past, and there certainly will be more in the future, to design and build an all-purpose box car. In general these cars consist of perforated steel sheet walls between which beams may be located at almost any location for either holding the load down in place or for building up tiers to support lading. The purpose is to permit shipments to move without the expense and inconvenience of crating. Many problems are involved in making such a car practical. Weight and initial cost are increased considerably. No one knows how many cross beams will be needed per car nor whether to keep these with the car, where they may be lost or stolen, or to hold them at some car shop with the hope that someone will know where they are when next needed. Nevertheless, the idea of an all-purpose car, for the purpose of making shipment by rail more economical, is fundamentally sound and should be tackled by an aggressive engineering department in the same manner as difficult aircraft cargo handling problems are being energetically worked out by that branch of the transportation industry.

There is much speculation as to where airplanes will fit into the picture of handling perishable foods. Some have the idea that the railroad refrigerator car will be doomed after the war with the advent of large cargo planes.

There is no doubt that air freight will not be long in attempting to bite off the most perishable portion of food transportation. The exact point at which both marketing conditions and economy determine whether foods will be shipped by air or rail is certainly one which no one can determine at present. The success with which each form of transportation solves its own problems will have the greatest effect on where the division line will be.

There are many physical problems which the air cargo plane will not find it easy to solve. As an example, consider the Chicago food market. Approximately 120,775 refrigerator cars per year, or nearly 400 cars per working day, were handled by it. Assuming that a cargo ship will haul from 15 to 20 tons, which is similar to possible refrigerator-car loads, this would mean that facilities would be required for accommodating both the ships themselves and unloading them. The economy of the cargo ship is based on its availability for a large number of round trips yearly and the impos-

(Continued on page 762)

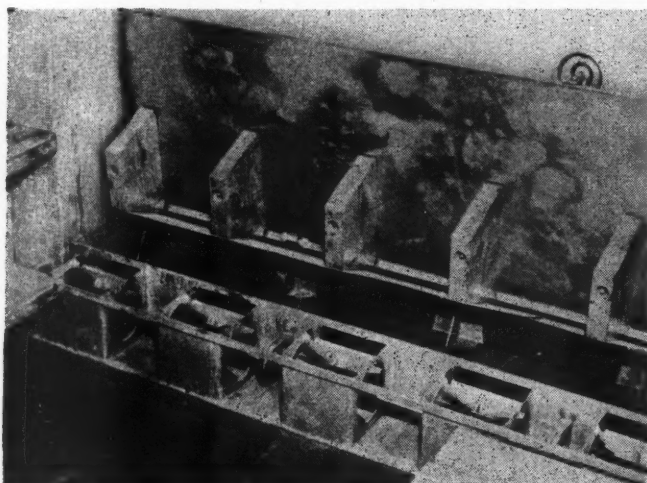


Fig. 3—Fans for Forced Air Circulation in Refrigerator Cars Increase Safe Loading Capacity

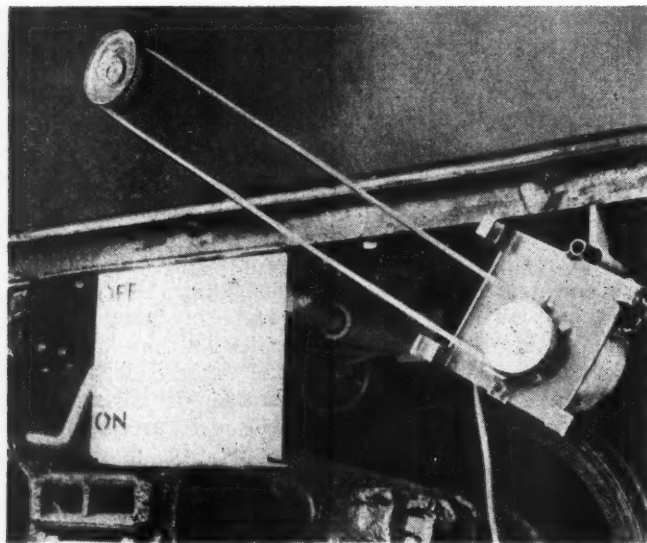


Fig. 4—A Mechanical Drive for Refrigerator Car Air-Circulating Fans

Non-ops Reject New Wage Award

Appeal to Congress for declaratory statement to make August 7 agreement with roads effective over Director Vinson's veto; Meanwhile strike balloting continues

WASHINGTON, D. C.

THE heads of the 15 non-operating railway labor unions are prepared to call a strike rather than accept the differential wage increases approved by Economic Stabilization Director Fred M. Vinson on November 8.

This position was made clear November 9 to a subcommittee of the Senate committee on interstate commerce in what its chairman, Senator Edwin C. Johnson, Democrat of Colorado, termed an "ultimatum" from George M. Harrison, grand president of the Brotherhood of Railway & Steamship Clerks and spokesman for the 15 non-op unions, in which the committee was told that the unions will strike unless Congress takes steps to make their agreement of August 7 with the railroads—providing for a straight wage increase of eight cents per hour—legally effective in spite of Mr. Vinson's disapproval of that agreement.

Mr. Harrison made this statement, he admitted subsequently, even though he "supposed" government operation of the roads would be the "inevitable result" of an order to strike.

The "Special Emergency Board" Delivers

The wage increases to which Mr. Vinson gave his approval, after turning down the award of the first emergency board, the so-called Sharfman board, of an increase of eight cents per hour, were recommended in a report of the "special emergency board" selected by President Roosevelt to review the situation arising out of the inability of Mr. Vinson to "sell" his ideas of a suitable solution of the problem to the union heads.

As reported in *Railway Age* of November 6, page 721, this special board heard Director Eastman of the Office of Defense Transportation and counsel for the unions and the carriers state their views on the questions before it on October 30. While this board, under the executive order creating it, had until November 15 to make its report to the President, it exhibited almost phenomenal celerity in submitting its report well in advance of that date. In view of the fact that its recommendations were "consonant with the stabilization program," Director Vinson announced that he would "not disapprove" the proposed wage increases, which were, he said, based upon "the substandard and interrelated job classification criteria."

The recommendations made by the special board and accepted by Mr. Vinson are as follows: All wages less than 47c per hour to be increased 10c per hour; all those receiving 47c and less than 57c per hour to be increased 9c per hour; all those receiving 57c and less than 70c per hour to be increased 8c per hour; all those receiving 70c and less than 80c per hour to be increased 7c per hour; all those receiving 80c and less than 90c per hour to be increased 6c per hour; all those receiving 90c and less than 97c per hour to be increased 5c per hour; and all those receiving 97c and over per hour to be increased 4c per hour.

As outlined by Mr. Vinson, under this sliding-scale arrangement "a third of the employees will receive more than 8 cents per hour. Half of the employees will receive 8 cents per hour or more. The half that will receive less than 8 cents are now paid 70 cents per hour or more and under the recommendations will receive 77 cents and up."

Sliding-Scale "Wholly Unacceptable"

That a proposal embodying substantially these terms had already been offered the union leaders, and turned down by them, as early as October 12, their report of October 26 to their members disclosed. This document, which was widely distributed, was reprinted in the Congressional Record of November 4 at the request of Representative Burdick, Republican of North Dakota. A paragraph from that report of the union officers to their members reviews a conference they held with President Roosevelt on October 12 in these words:

"In this conference we were informed that, since the emergency board had recommended an increase of 4 cent per hour for the engine, train, and yard service employees, that part of the understanding of September 16 providing an increase of 7 cents per hour to the employees we represent in the higher wage brackets could not be carried out and that such employees could only be given an increase of 4 cents per hour. This was wholly unacceptable and the President was so advised."

The "understanding of September 16" referred to in this statement was a conference the union heads had with President Roosevelt on that date, in which they said they offered to accept a sliding-scale wage increase on the following terms: "Wage rates of 46 cents or less per hour to be increased to 56 cents, the 47-cent rates to be increased by 9 cents per hour, rates of 48 to 75 cents per hour, inclusive, to be increased 8 cents, rates of 76 cents per hour and above to be increased 7 cents; this scale would confine the cost of the wage increase to \$204,000,000 per year." The union heads stated that they considered that an "understanding was reached" with the President on this basis, but that it never went into effect because later that day, after discussing it with Mr. Vinson, he concluded to defer action in the non-op case until the report of the board considering the ops' case was received.

The special emergency board which made the sliding-scale recommendation that received Mr. Vinson's approval had heard the views of the unions and the carriers on this question, and had asked for alternative proposals along that line, as was pointed out in our account of the hearing in the issue of October 30.

The first public expression of the non-op leaders attitude toward the specific terms for a non-op wage increase which Mr. Vinson approved on November 8 came in the course of the Senate subcommittee hearing on that day in which Bert M. Jewell, chairman of the group of non-op leaders handling the wage negotiations and president of the Railway Employees Department of the Amer-

ican Federation of Labor, was testifying in favor of Senate Joint Resolution 91. This resolution, introduced by Senator Truman, Democrat of Missouri, would put Congress on record to the effect that the wage agreement of August 7 between the 15 non-op unions and the railroads

"is an appropriate and valid settlement of the dispute submitted to the consideration of the emergency board which reported to the President on May 24, 1943, made in accordance with the processes of the Railway Labor Act, and is in conformity with existing requirements of law applicable thereto and particularly with the requirements of the Act of October 2, 1942," [the so-called price stabilization law].

In the course of Mr. Jewell's statement he was interrupted by Senator Clyde M. Reed, Republican of Kansas, who, after reading an announcement that the report of the special emergency board had received executive approval, asked if this settlement of the case was satisfactory. In reply, Mr. Jewell said, "It is just about as unsatisfactory as every other result in the whole procedure." He added that the sliding-scale idea is "wholly destructive" of the entire wage structure as built up over a long period of years. The special board was "instructed to do a certain thing," Mr. Jewell asserted, that is, it was told to recommend to the President wage adjustments in accord with Mr. Vinson's opinion.

This attitude was forecast in the union heads' report to their members of October 25, in which they said, "We have no reason to expect that any recommendation of this board, which would meet with the approval of Director Vinson, would provide the basis for any agreement which would be satisfactory to those we represent and acceptable as a substitute for the existing agreement of August 7, 1943."

Say Special Board Was "Not a Free Agent"

This position was developed in a statement made later in the day by the non-op leaders, in which they termed the special board's recommendations and Mr. Vinson's opinion "unsatisfactory and unacceptable." Continuing, the statement read, "These recommendations contribute nothing whatever toward a settlement of the railway wage situation and will only add confusion and further difficulties." The recommendations are "impossible of acceptance," it went on, "not only because of the additional inequities they would cause but also because they are unworkable and impracticable of application."

"The report of the special emergency board," the union heads here repeated, "was no surprise, as the board was not a free agent under the order which created it and simply followed the instructions of the Director of Economic Stabilization."

One provision of Director Vinson's opinion was not touched upon in these comments by the non-op leaders. It reads as follows:

"One problem remains growing out of the fact that under the procedure of the Railway Labor Act the operating and non-operating cases have been regarded as separate disputes. The higher paid non-operating employees overlap, in the amount of pay they receive, the lower paid operating employees. Under the new wage scale these higher paid non-operating employees will receive a slightly greater increase than the operating employees who receive like pay. I shall, therefore, advise the chairman of the National Railway Labor Panel that if he receives notice of a proposed change (under paragraph 2 of Executive Order No. 9299) for the operating employees which will increase their rates of pay by the amount of the difference between the increases for the non-operating employees in the applicable rate ranges set forth above and 4 cents (which has already been awarded the operating employees), he may regard such a proposal as in conformity with the stabilization program."

As early as October 18 the non-op leaders revealed to the press their inclination to appeal to Congress for a settlement of their case on terms acceptable to them, in effect acknowledging that they anticipated no such settlement from the executive department of the government. This disclosure was reported in *Railway Age* of October 23, page 652, and as there pointed out, it was promptly followed by the introduction of a joint resolution in the House which was designed to carry out this idea. No definite action was taken on this resolution, however, and it remained for the Senate interstate commerce committee to proceed with the legislative processes sought by the unions through its consideration of Senator Truman's resolution. Another proposal of this nature was put before the House on November 5 by Representative Crosser, Democrat of Ohio, a member of the House committee on interstate and foreign commerce, in the form of House Joint Resolution 187.

While the purpose of the Crosser resolution is similar to that of the Truman resolution, it differs in that it would put Congress on record

"that the agreement made . . . on August 7, 1943, by and between the carriers and railway labor organization parties thereto, is in accord with the requirements of the Railway Labor Act and all other requirements of law, and shall be held so to be, anything in the law or laws of the United States to the contrary notwithstanding."

In the hearings held by the Senate subcommittee on the Truman resolution on November 8 and 9 the non-op leaders were afforded an opportunity to state their reasons for appealing to Congress to make the wage increase agreement negotiated with the railroads on August 7 effective in spite of Director Vinson's disapproval of its provision of a straight eight cents per hour increase. In addition to Mr. Jewell and Mr. Harrison, E. E. Milliman, president of the Brotherhood of Maintenance of Way Employees, and Donald Richberg, their counsel, appeared before the subcommittee. Mr. Jewell's statement was largely an outline of the background of the Railway Labor Act and of the development of the controversy with Mr. Vinson and the negotiations of the union leaders with him and President Roosevelt. Before he had completed his statement, however, Senator Truman interjected the observation that "railway laborers work for what they get," while it has, he said, been proved that "at least 25 per cent" of laborers in war industries "don't do a lick of work." Mr. Jewell concluded by asserting that passage of the resolution before the committee would be the "solution of our difficulties."

Alleges "Black Market" in M. of W. Labor

Stressing the shortages of men and the high turnover in employment in the railway maintenance field, Mr. Milliman asserted that the lower paid unskilled workers were particularly attracted away from railway work by higher wages which he said were paid by other industries. The shortage of maintenance workers has, he went on to say, resulted in many railroads letting contracts to outside firms to perform maintenance work normally performed by the roads' own employees. These contractors, he said, can and do pay substantially higher wages than the roads are permitted to pay for identical work. He supplied to the committee a list of instances where maintenance of way work was contracted out by a number of roads in various sections of the country, comparing the wage rates paid by the roads and the contractors for the same work, as interpreted by him, this being one of the exhibits from the emergency board hearings. These data were inserted in the Congressional

Record of November 8 by Representative Voorhis, Democrat of California, in connection with a speech in which he asserted that the failure of the government to give the non-ops an eight cents per hour increase in the face of such "not only indefensible but utterly fantastic" circumstances is resulting in a "railroad black labor market."

"Jail Birds and Bums"

Mr. Milliman proceeded to describe to the subcommittee various expedients which the railroads have resorted to or considered in an effort to enlarge their maintenance forces, including the importation of Mexicans and the use of enemy aliens and war prisoners—which he termed the "most idiotic thing I've heard of yet." Further than this, he asserted, the roads have "bailed out the bums and the jail birds" and taken children out of school in their efforts to build up maintenance forces. Members of his union, said Mr. Milliman, will not work with aliens and prisoners of war while their sons are in the service, and they resent having Mexican workers who are not subject to withholding taxes put beside American citizens who are paying such taxes and are subject to military service.

Going on from the background developed by Mr. Jewell, Mr. Harrison on November 9 first gave the subcommittee his analysis of the Vinson opinion and then elaborated upon the union heads' reasons for rejecting this solution of the difficulty and seeking the aid of Congress. As calculated by him, the wage increase of eight cents per hour would have cost, for the year 1942, \$185,080,676, while for the same period the special emergency board's sliding-scale proposal would have cost \$167,026,574, or \$18,054,132 less. Thus the "inflationary fuel" that disturbs the stabilization officials is, according to Mr. Harrison, a net sum of about \$18 million, over which "four or five months of wrangling" has developed.

After the Sharfman board recommendation was submitted to President Roosevelt, the witness continued, he went to the White House on May 27, at which time the unions were "urged" by the President to accept the eight cents per hour increase. When they agreed to do that, he added, they considered the matter done with, until they were notified of Mr. Vinson's refusal to approve that award. On his next visit to the White House, said Mr. Harrison, he learned that he was not the only person who was "dumbfounded" by Mr. Vinson's action. Nevertheless, he went on, in spite of "eight or nine" meetings with the President and with War Mobilization Director Byrnes, and "five or six" with Mr. Vinson, he had been "unable to compose our differences."

After some further elaboration upon the negotiations that went on through the summer and fall, Mr. Harrison declared that the members of the non-op unions are "mad about the way they've been treated." Application of a sliding-scale wage increase would raise serious practical difficulties, he pointed out, because the groups that would suffer a reduction—as compared with the straight eight cents per hour increase—would be the skilled workers, the shop mechanics, telegraphers, signal men, station agents, "white collar" workers and others whose skills the railroads cannot dispense with. These men, he said, feel now that they are paid less than other industries pay, and they will not "accept what's been done." Congress, then, he asserted, is the last resort short of a strike.

When Senator Johnson remarked that this "ultimatum" put Congress in the "bad position" of having to override the President, since it was recognized that "Mr.

Vinson does what the President wants him to do," Mr. Harrison replied that, while he would "just as soon have it that way," nevertheless it was his position that a critical situation faces the country, in which Congress can save the country from a railroad strike. If Congress should undertake to pass the Truman resolution, or to take other legislative action to bring about the solution of the problem that they desire, Mr. Harrison assured the subcommittee that the union leaders would be tolerant of the delays incident to legislative processes, and would not precipitate a strike, although they were confident their members' ballots would be cast in favor of it, unless they become convinced that the situation is "hopeless" or that they were being "given the run-around."

"You have the bear," he told the subcommittee. "Find some way to get him in the cage. We want to let loose of him."

When asked by Senator Johnson if the dispute currently is entirely between the employees and the government, Mr. Harrison said the situation can be put that way. The unions do not blame "anybody in the industry" for what has happened, he declared. They have, he asserted, made an agreement with their employers in which they consider the roads acted in good faith, and the roads supported them before the special emergency board. The roads consider their manpower problem "desperate," he added, and quoted John J. Pelley, president of the Association of American Railroads, as having told Mr. Vinson that.

Mr. Richberg closed the unions' presentation of their case with a discussion of the legal phases of the situation resulting from the introduction of the special emergency board into the controversy and those affecting Mr. Vinson's power to overrule an emergency board chosen and acting according to the provisions of the Railway Labor Act, in this following much the same line of reasoning as he employed in discussing the same points before the special board.

Going on from this foundation, the unions' counsel said that they do not ask Congress to "override the President," as Senator Johnson had suggested. What they do ask, he said, is that Congress should clarify its original purpose, as indicated in the price stabilization legislation, that the Railway Labor Act's processes should not be disturbed by any of the provisions of that law. Legislation such as the Truman resolution would be "entirely consistent" with other laws, he asserted, and the administration "might welcome" action of this nature. Under the law, he went on, it is the duty of the President to adjust wages to correct gross inequities, which the Sharfman board found to exist, and there is no power in Director Vinson "or anybody else" to ignore this provision of the statute.

Says Question Not One of Inflation

The issue is not one of inflation; the fundamentals of the stabilization act do not apply at all; the cost of living will not be affected one way or the other, said Mr. Richberg. The only basis, so far as he could see, on which Mr. Vinson has interfered with the consummation of the August 7 agreement, is his personal feeling that the lower paid men should have more, and the higher paid less, than the agreement provides. Where does he get his power to do this?—the unions' counsel asked. Congress gave him no such power, he declared. Congress gave the President wide authority to act to aid the prosecution of the war, Mr. Richberg went on, but the way in which the wage increase is distributed

among the employees has, as he sees it, nothing to do with the prosecution of the war.

After Mr. Richberg had argued in this vein at some length, and had touched upon the authority of Congress to pass declaratory laws and on the unions' contention that Mr. Vinson had acted "in a vacuum," denying them the benefit of due process of the law, Senator Johnson remarked that it was "comforting" to him to have it pointed out that the non-ops' case was not one setting a precedent for wage increases, but an instance of the law not being executed.

When Senator Johnson added that he wanted to uphold the President in a fight against inflation, of which he was very much afraid, Senator Reed interjected the suggestion that the most important point involved in the case is not inflation, but the preservation of constitutional processes.

Railroads Will Accept Mandate of Congress

At this point the subcommittee asked representatives of the railroads whether they favored the enactment of the Truman resolution. In replying to this question and others, Jacob Aronson, vice-president of the New York Central and counsel of the Carriers Conference Committees, presented the railroads' views.

While they do not concur with some of the statements made to the committee, said Mr. Aronson, and while they may not and do not approve taking a strike vote, the railroads in good faith have agreed to a straight increase in wages of eight cents an hour and they are prepared to and desire to put that agreement into effect as soon as it is legal to do so. The railroads, he said, think the increase justified. Since they are not parties to the controversy between the government agencies and the unions, they neither approve or disapprove the Truman resolution, he declared.

Whether or not the proposed legislation is a good solution of the problem, it is a solution, Mr. Aronson said, and he assured the subcommittee that there would be no remaining impediment to the railroads going ahead under the August 7 agreement if the Truman resolution should be passed by Congress.

Designing Car Equipment to Meet Postwar Competition

(Continued from page 758)

sibility of holding a \$500,000 ship over a day or two for unloading as compared with a \$4,500 refrigerator car is obvious.

Assuming that air freight will absorb the cream from the perishable food transportation market, what then, is the railroad's problem? It is to increase the desirability and economy of rail movement by improving schedules where possible and by hauling full loads. The reason for not handling full loads in refrigerator cars is that, because of the simple form of ice refrigeration generally used in most refrigerator cars, where circulation of the air in the car takes place by convection only, there is a considerable difference of temperature between the bottom and the top of the load. The height of the load is limited lest the top of the load find itself in a temperature zone above that required for satisfactory shipping. Some means must be devised to give sufficient air circulation within the car to afford uniform top and

bottom temperatures. Several methods of accomplishing this have been developed, one of which is shown in Fig. 3.

A blower housing is mounted in the space between the floor rack and the floor of the car in such a way as to take up no normally usable space in the car. Floor racks are raised to 7½ in. above the floor to allow for efficient blower size and there are seven blowers on one shaft located in front of the bunker, and facing it, at either end of the car. The blowers blow air into the bottom of the bunker, up through the ice and out over the top of the load. The advantage in circulating the air counter to natural convection currents is that the coldest air is blown over what is normally the warmest part of the load. This forced circulation is equally advantageous for winter shipments when heaters are used in place of ice.

The blowers are driven by means of a rubber-tired drive wheel which is lowered into the car wheel, see Fig. 4. Correct pressure between the two is maintained by a coil spring. Power is transmitted from the drive shaft to the blower shaft by a V-belt and two pulleys. Wheel and pulley ratios are such that at 30 m.p.h. train speed the fan output is 1,500 c.f.m. and at 50 m.p.h. the fan output is 3,000 c.f.m. In terms of air turnover within the car this amounts to approximately three changes per minute. Another feature of this arrangement is that a small ¾-hp. motor can be hung on the side of the car and used to drive the blower for pre-cooling the car without opening the doors. The pre-cool motor is removed when the car is in transit.

Suggests Perusal of All Possible Markets

There is another step which can be taken to increase the flexibility of this type of car. That is to make use of the icebunker space when the car is not being iced. Produce such as lettuce and carrots, and other products during certain seasons, are shipped without end icing and 2½ ft. at each end or approximately 18 per cent of the space in the car is wasted. With a bunker which can be pushed into its normal position or back against the end screen, this space is made usable when needed.

In a car in which uniform temperature can be maintained, orange boxes can be stacked three high instead of two high, melon boxes can be stacked five high instead of three high and cherries and figs, which have been considered so perishable that they had to be shipped in express cars, can be shipped by refrigerator car. Taking 15 different commodities the average possible increase in loading amounts to 30 per cent. The real meaning of this is apparent if we apply the 30 per cent to a yearly Pacific Coast car loading figure of 250,000. The result is a saving of 58,000 car loadings.

The conclusion to be drawn from these various examples of specialized equipment is that the railroads should not pull back into their shells after the war with the feeling that they are doomed to haul only coal, iron and rock. They should take the same attitude that the aircraft people are now taking; namely, that of investigating all possible markets to see how they can adapt their equipment to specific types of transportation business.

Specialized freight can come within the theory of long heavy hauls for rail transportation if an effort is made to see that equipment is furnished which can be loaded to capacity.

The resulting reduction in equipment needs and in its operating cost should help broaden the scope of economic transportation by rail.

Maintenance Officers Ponder the Serious Shortage of Help

Study over-all situation and consider specific means to hold ranks intact and to overcome shortages

WITH labor the Number One problem of the maintenance of way and structures forces, this subject was given a prominent place in the program of the wartime conference of the American Railway Bridge and Building Association in Chicago on October 20-21. The feature of the program in this regard was a four-part symposium on The Problem of Labor Supply, which was headed by Edwin M. Fitch, assistant director, Division of Transport Personnel, Office of Defense Transportation, who reviewed the over-all picture of the labor supply as it affects the railways, and more particularly the maintenance of way and structures forces.

Mr. Fitch was followed by W. G. Powrie, engineer maintenance of way, Chicago, Milwaukee, St. Paul & Pacific, who told of the experiences of his road in the employment of high school boys in maintenance of way work since early last spring, and by Malcomb Young, supervisor of track, Pennsylvania, Warsaw, Ind., who recited the experiences of his road in the employment of women in maintenance operations. The fourth part of the symposium was a paper by L. E. Peyser, principal assistant architect, Southern Pacific, who told of the effective aid that has been secured by his road through the employment of week-end workers.

All of these addresses and the paper by Mr. Peyser are abstracted in the following columns. A running report of the meeting, with abstracts of other addresses, papers and committee reports, including a report on How to Secure and Hold Men, appeared in the *Railway Age* for October 30 and November 6.

E. M. Fitch* Discusses The Manpower Problem

That the manpower problem is the Number One problem of war industries, and of war-essential industries generally, is repeated now far more often and with much greater emphasis than it was a year ago. In spite of that, you in the bridge, building and water service departments of the railways have held your own. If the statistics tell the true story, you have done particularly well in skilled occupations.

The real story of manpower difficulties during the last year is revealed by the statistics of helper, apprentice and laborer occupations. In such occupations, employment has fallen off much more sharply than is good for your departments. In terms of number of employees, maintenance of way and structures helpers and apprentices have fallen off nearly 15 per cent, and maintenance of way laborers, other than trackmen, 18 per cent. Again, if the statistics tell a true story, it is these less skilled, less well-paid occupations that have presented your most serious manpower problem during the last year, and which will present an even more serious problem during the coming year.

On the assumption that the man-hour productivity of employees has not decreased, you have gained a substantial addition to your working force during the last year through increases in the average number of hours worked. Even in 1942, the men in your

department were working 50 hours per week or more on the average, a substantially greater average hours than almost any other department of railroading, and far greater than in most war production plants. It is highly doubtful whether it would be wise to attempt any further increase in hours worked, though there are some occupations, such as bridge and building painters, where the hours worked are below the average for all bridge and building employees.

Foreman Key to Turnover Troubles

When the labor needs in the railroad industry are compared with new hires, it is perfectly obvious that the Number One manpower problem of the railroads, as for many other American industries, is the problem of turnover. If turnover can be reduced, even by rather small percentages on the average, and the present rate of new hires continued, there should be little labor shortage in the railroad industry, except in the most critical areas in the country.

A compendium of letters from workers in a recent issue of the Reader's Digest indicates the major reasons for their dissatisfaction with their jobs. Almost every one of these letters indicated that the worker's major grievance was because of his foreman. I think that it is quite generally recognized that the foreman is the key to any program of reducing turnover. There are, of course, many reasons for worker transfers with which the foreman has nothing to do and over which he has little control. At the same time, a foreman who intelligently appreciates and sympathizes with the work problems of his gang, and who knows how to be firm and decent at the same time, can go a long way toward counteracting the motives which lead employees to quit.

In this regard, I would like to suggest that the training agencies of the War Manpower Commission be called in for help. The carrying out of practical, down-to-earth plans for foremen training constitutes a major contribution of its Training-Within-Industry division. Foremanship courses are also available through public vocational schools. There are field representatives of the War Manpower Commission training agencies in key cities throughout the country.

Your division officers should get in touch with them and see what can be done toward instituting short courses for the training of your foremen.

Recognition of the problem of turnover has placed a great deal of emphasis upon the importance of exit interviews. I realize that the railroads have not had personnel departments which would lead naturally to the installation of such devices as this. Nevertheless, I think it is perfectly possible for division officers to place on certain of their supervisory officers the responsibility for conducting an exit interview with every man who gives notice of his intention of quitting. This will do two things—it will save some men to your departments, and it will also put the spotlight on some employment conditions which, if altered, will reduce the reasons for quitting.

There have been reports from all over the country of housing situations which have affected railroad workers, and which, in some localities, have made it exceedingly difficult to keep men on the job. Railroad officers, therefore, should keep in close touch with housing situations which lead workers to become dissatisfied with their jobs. The Federal Public Housing Authority is ready to help. I have recently seen a long list of the

* Assistant Director, Division of Transport Personnel, O. D. T.

accomplishments of this agency in terms of alleviating bad housing conditions which were affecting railroad workers.

Generally speaking, the railroads have fared well at the hands of local selective service boards. At the same time, the last year has seen some developments that were not good for the industry. Every time a railroad wage case goes through the processes of the Railway Labor Act, quite a number of people, usually outside the railroad industry, have a lot to say about "featherbed" rules. An article in the Reader's Digest on this subject, copied from Barron's Weekly, was widely read and commented upon throughout the country. It was an inaccurate article with respect to some of its facts and was grossly in error with respect to some of its emphasis. Many local selective service board members read that article and came to the conclusion that the railroads did not deserve the manpower protection of occupational deferments. The Office of Defense Transportation did its best to counteract some of this unfortunate publicity, and we hope these measures had some counteracting effect.

We finally came to the conclusion that the proper way for the railroads to solve their selective service problem was to join in with the replacement schedule program of the selective service system. The replacement schedule procedure gives state selective service officials an opportunity to look at the manpower problems of a given division of a railroad and to make a much more intelligent decision as to the number of men who should be drawn into military service. Its net result is a kind of agreement between railroad officers and selective service officials as to which men will be called to military service and which will remain on occupational deferment, and for how long. Once such a schedule is submitted and approved by the state selective service director having jurisdiction, Forms 42-A are filed for the individuals for whom occupational deferment is indicated by the road's replacement schedule, and selective service is in a position to give a fairly good guarantee that these requests for deferment will be honored.

Stabilization Plans

Another development during the last year of considerable importance to the railroads is the extension to them of the stabilization plans of the War Manpower Commission. For the most part, these plans have been developed locally to meet particular local situations, although they must conform to certain minimum national standards. In brief, the minimum standards to which all plans must conform provide that a worker may not transfer under ordinary circumstances from an essential activity to a less essential activity, and that he can only transfer from one essential activity to another after receiving a statement of availability, in the case of the railways, from his last employer or the Railroad Retirement Board.

The intent of the regulations under this plan is to reduce the amount of turnover due to resignations through the device of the certificate of availability, and to give the railroad industry, through the Railroad Retirement Board, first call on workers with previous experience in the railroad industry.

On the Pacific Coast, and in an increasing number of areas in the East, a further step has been taken by requiring certain classes of workers, or all workers, to be referred to employers only through the United States Employment Service or agencies authorized to make referrals by the War Manpower Commission. In the case of the railroad industry, the Railroad Retirement Board exercises the function of the United States Employment Service. It would not be possible for me to outline the details of these various stabilization programs as they may affect you. The important thing is for designated railroad officers in the respective areas covered by stabilization programs to inform themselves of the details of the plans covering their particular areas, and to try to guide their employment policies accordingly. There is an important obligation upon you not to issue certificates of availability to your employees unless you cannot avoid it, and not to hire workers from essential activities where such certificates are required.

When I spoke to you a year ago, I emphasized the fact that the railroads of this country were still privately operated, and that the primary responsibility for the provision of adequate railroad transportation lies in the hands of railroad managements, working within the limits laid down by the Office of Defense

Transportation, or, in the case of manpower, in most respects, by the War Manpower Commission. It is still true of manpower as of railroad operations—that the primary responsibility rests upon you. Your record of accomplishment in this respect is a matter in which you should take great pride.

There are many signs that the difficulties of next year, in terms of manpower, will be greater than during the last year. Director Eastman of the O.D.T. remarked recently that the next six months will constitute the crucial period, and that if we can get over that period with success, there is some hope that no future time will present dangers of the same seriousness. Our watchword must be co-operative planning toward a goal which we are all determined to achieve—co-operation between labor and management and the Office of Defense Transportation—co-operation between railroads and the War Manpower Commission—and co-operation between railroad labor and management.

W. G. Powrie* Reports on High School Boys in M. of W.

Child labor regulations in many states allow the employment of boys 16 and 17 years of age on railroad maintenance work, with varying restrictions as to the number of hours they may be worked. In most states, the boys must secure permits to work from the proper state or municipal authorities. In one instance, where the state statutes did not permit boys under 18 years of age to engage in railroad maintenance work, the regulations were amended by special order for the duration of the war so those 17 years old, and later 16 years old, could be employed on such work. In those states that still prohibit the employment of boys under 18, similar action would be helpful. The employment of boys during their summer school vacation period, and on week-ends, has aided materially in the completion of maintenance programs on all roads that have used them.

Early last spring a number of our division maintenance officers called on the high school authorities in the villages and cities along their divisions to secure assistance in recruiting boys for work on the railroad. Part-time work was offered in bridge and building crews and section gangs during the months in which school was in session, and full-time work was offered during vacation periods. After a frank discussion of rates of pay, working conditions, transportation facilities, and the supervision to be provided for the welfare and safety of the boys, hearty co-operation was secured.

Where a number of these young men could be worked in a crew, we enlisted the services of the high school coach or one of the teachers to act as monitor. These monitors were of great assistance in handling the boys, especially in preventing "horse play," practical joking, and in warning them against unsafe working practices. Furthermore, they formed an outlet for any grievances or suggestions on the part of the boys, with the result that sometimes desirable changes were brought about in the interest of both the boys and the work.

Safety is a major consideration in the employment of boys on the Milwaukee, and all other factors are subordinated to that end. To the extent possible, the boys are assigned to work for which they are best fitted physically. Furthermore, in doing some of the heavier jobs, more boys are used than the number of men usually required.

One important consideration in the employment of boys is the supervisory force in the crew. In the first place, an increased number of lead men and assistant foremen is needed. In addition, the foremen must have great patience and a keen understanding of boys.

Boys doing bridge and building work were taken into the regular camps of the bridge and building forces, but special camps were provided for some track gangs composed entirely of boys. These camps were equipped with electric lights, running water and shower baths. Furthermore, an effort was made to serve the type of meals the boys liked.

The quality of work done by these young men is satisfactory. Their lack of experience and skill in the trade, of course, makes their progress slower than that of a crew of experienced men,

* Engineer Maintenance of Way, Chicago, Milwaukee, St. Paul & Pacific.

pects, power rests t is a ar, in year. at the if we e that sness. goal tween tation Com-man-

but they do well by working them in with a sufficient number of experienced men. It is especially noticeable that they like and excel in handling any type of power tool. When the fall school semester opened, we lost the full-time services of the majority of the boys we had employed during the summer. They have been encouraged to remain with us for part-time and week-end work, and many are doing so. The help to be gained through the use of part-time workers during the winter months will be quite important to us, and will be exploited fully. In areas where we have a critical shortage of labor, I believe that we can prevail upon the school authorities to release the boys from school for short periods to assist in emergency work.

Women Workers — A Report by Malcomb Young*

We first started hiring women as crossing watchmen. During the first two months we placed nine of them on crossings through the town of Warsaw, Ind. Six of this original lot are still working and are doing very satisfactorily; however, some of them do not work as regularly as the men whom they replaced. We have never had an accident at a crossing protected by a woman, which was in any way her fault.

When we first established on my territory the women's gang which was to perform track work, which was in December, 1942, we began by hiring two women who were relatives of men who had been railroaders for many years. Since then we have built up the gang to 25.

There has been less turnover in this gang than in any other extra gang on the subdivision, though the absenteeism has been just about as bad.

The women working for us now are about equally divided between those who have lived in Indiana for some time and those who have come to Indiana recently with their husbands or other relatives. Keeping families together has been one of the most effective ways we have found to hold our labor. We have encouraged men moving into our territory to bring their families and to settle near their headquarters. We have tried to help them find and rent homes or, if in the country, to find small farms.

Women's Track Gang a Success

Starting the women's gang in December, we had some trouble during the cold months immediately ahead finding suitable jobs for them. We made a few false starts, but the gang accomplished the following work during the winter: They levelled and board-lined six miles of crushed stone ballast; loaded and unloaded all cars of material, except those handled by work trains, including scrap, splices, crossties, tie plates, tools, etc.; cut all of the brush along 10 miles of right of way; shoveled snow from platforms and sidewalks and swept it from switches; and helped lay two miles of 100-lb. rail. On this last mentioned work they loaded and unloaded all of the material involved except the rail. None of these women can spike ties, except one, and she isn't very good at it. They are white, and of various weights from 105 to 180 lbs. They like the work and like working on a railroad.

The foreman in charge of the gang has been more largely responsible for its success than anyone else. He started the gang and has stuck with it. If he thinks the women are becoming too tired, he tells them to rest; if he thinks they are loafing, he gets tough and tells them so. When we established the gang, he was one of few who believed that it could succeed, and he has made it a success.

We have tried to educate the women to know what they are doing, and why. When the foreman started telling them what they were doing and why they were doing it, both the quality and the quantity of the work improved almost at once. There were four relatively minor personal injuries in the gang during the first five months of its existence. Since May, however, no one has been hurt. Apparently, it took that long to convince some

of them of the real importance of safety rules, and for them to become accustomed to their new work.

On our St. Louis division we have employed women in the bridge and building department as painters, with some success. The principal trouble has been that there has not been enough of them to make a real gang and to warrant putting a foreman in charge of them.

We now have 21,500 women working on the Pennsylvania. Many are in our car and machine shops. Others truck freight, drive trucks, wash engines, clean cars, and handle mail. There are also a few in train service around Philadelphia, Pa. It is no longer a case of whether women can help in railroad work, but rather one of being able to get them to work, for in our part of the country they are becoming almost as scarce as men.

Summarizing the experiences of the last year, the following principles relative to the employment of women can be laid down: (1) So far as possible, women should be kept in gangs separate from men; (2) give them a good foreman who believes they can succeed; (3) Don't pamper them; (4) Educate them and tell them why the particular work is being performed; and (5) Make them realize they are helping to win the war.

L. E. Peyser* Tells of Week-End Part-Timers

During 1942, when a Southern Pacific main-line trestle caught fire, the agent at a nearby town appealed for assistance to the local volunteer fire department. The immediate response and effective work of this organization saved the greater part of the structure. The superintendent of the division upon which this occurred was greatly impressed by the way this organization had mobilized its manpower to fight the fire and reduce delay to important military and civilian trains. He was still thinking about it a few months later when, because of a shortage of freight handlers, a large yard began to choke up with freight cars that were waiting to be unloaded.

On an impulse, he communicated with the agent, explained the problem and asked what he thought might be done to get the local people to lend a hand again. The following Sunday, the agent put a total of 40 college professors, bankers, storekeepers, clerks and farmers aboard a train for a short ride to the choked yard. A week later he dispatched these same men and 60 more. The cars were unloaded and the jam was broken so that the yard could function normally to handle the huge volume of military and other freight that passes through it. Asked how he had recruited the men, the agent said: "I just walked down Main street and told them we needed some help."

A little later, the same group helped out on a few Sundays, handling baggage at another point. Following this, as their latest and perhaps most unusual job, these same men helped relieve a serious shortage of track maintenance men, and on each Sunday, about 45 men have been working from eight to ten hours swinging picks and shovels and handling tampers. Practically all of them are "white collar" men during the remaining six days of the week, but they were eager to do a day of real war work for prevailing laborer's wages on the seventh.

This local experiment having been so satisfactory, the idea was broadcast, and business and professional men in other towns and cities along our lines where track labor was needed, were asked to sign up for week-end work. The response was both gratifying and somewhat surprising. Students from universities, junior colleges and high schools made up the bulk of these temporary forces, but workers from practically every business and profession were represented. These patriotic week-end workers came in response to advertising appeals made in various cities on our lines, in some cases to announcements on local radio stations, and in others to personal appeals by station agents in their communities.

Furthermore, letters were addressed by our management to local bodies, such as chambers of commerce, telling of our needs and the approximate number of men that could be used to advantage.

The success of the campaign is reflected in the following tabu-

(Continued on page 769)

* Track Supervisor, Pennsylvania, Warsaw, Ind.

* Principal Assistant Architect, Southern Pacific.

HOW TO RAISE THE MONEY

to build super-railroads

By John W. Barriger

Vice-President, Union Stock Yards & Transit Co.

This well-known student of railroad operation and finance holds that, all other forms of transportation becoming "super", all railroad main lines should, for success in competition, be raised to standards permitting tonnage trains, adequately powered, to be moved long distances without intermediate restrictions in speed

THE principal component of the nation's war-time industrial effort has been the production of great numbers of improved ships, planes, and automotive vehicles, both for fighting and transport purposes. The "New York Times" recently reported that 1944 plane production, for example, would represent an expenditure of 40 billion dollars, nearly double the investment in the railroads after a century of development. The largest planes now are propelled by 8000 hp. of motor capacity; the largest locomotives produce only 6000 hp. It is easy, therefore, to foresee that a return to peace will remove many of the factors contributing to the present volume of railroad business and will restore and intensify the competition of air, water, and highway services. This is predictable all the more, since all these other agencies, except pipe lines, lend themselves to inclusion in programs of public works.

Attractive Rates and Low Costs Go Together

During postwar years of high levels of business activity, which all hope will prevail, the railroads should obtain their necessary share of the total business if their freight and passenger schedules are sufficiently fast and their selling prices, i. e., rates, are competitively attractive. The postwar problem of the railroads, thus, is one of running freight and passenger trains on faster overall schedules and producing service at lower cost per unit. The basic factors in successful railway operation will continue to be speed and train-load. If both can be advanced sufficiently, the competitive position of the railroads will be secure.

Accomplishing these objectives are technical matters of plant development and operation. The record of recent years—whether of the '30's or of the '40's—is proof of the versatility of railroad management in improving service, reducing expenses, and adjusting operations to traffic volume, whether high or low.

The best parts of present railroad plant and equipment

are fully adequate to the necessities which lie ahead. Unfortunately, too small a part of the whole embodies the highest standards. The standard of development of all primary main lines and all equipment of the trains which run on them needs to be brought up to the best. The attainment of this goal is the railroads' problem of the future. The difficulties are mainly financial ones. The technical progress has already been made to permit operation at the requisite speed and cost as soon as the entire railway plant and stock of equipment can become completely representative of its highest achievements.

I have stated before the opinion that "super-railroads" are needed, because these carriers are going to be confronted in the near future with "super-liners," both aerial and marine, "super-highways," "super-power" and "super-pipe lines." "Super-railroads" alone can meet such competition. By super-railroads I mean routes intensively developed physically, and supplied with motive power of such high capacity that maximum size freight and passenger trains can cross entire engine districts without consequential intermediate speed restrictions.

"Super-railroads" would embody the highest and most ultra-modern standards of physical characteristics, i. e., grades, curves, rail distance versus air-line distance between intermediate points determining the route, standards of design of tracks, bridges, signals, switching and communications facilities, freight, passenger, and engine terminals, equipment and every other feature of the railroad plant. These must be generally utilized throughout the primary main line mileage of the United States in order that freight and passenger schedules may be further accelerated, while train-carrying capacities are notably increased to effect substantial further reductions in operating costs. Quicker freight and passenger services need not be sought through materially higher maximum velocities than those now attained by the fastest trains of both services, but all intermediate speed-restricting conditions must be banished, and delays due to meeting and passing trains greatly reduced in order that the average operating rate of through freight and passenger trains, over entire engine districts, will closely approach the maximum one permissible. Grades on principal lines, except on mountain crossings, must also be reduced to such easy ascents that these maximum speeds can be continuously maintained by 1,200-ton passenger trains and 6,000-ton freight trains. Only in this way can comparatively low rates and fares produce the high train-mile earnings which will permit the property improvement necessary to hold and develop traffic in the face of bitter rivalry by competing transportation agencies which will surely have been improved, strengthened and multiplied by the war.

The basic reason for building railroads is to provide superior means of overcoming friction and gravity, which

This article is an abridgement of an address recently delivered at a meeting of the Railway Locomotive and Historical Society at Chicago.

are the two principal natural forces opposing movement of vehicles in inland transportation. Efficient railway operation depends upon reducing the magnitude of these resistances to the minima economically justifiable and then producing, with the greatest possible efficiency, the tractive forces necessary to overcome them, applying this hauling power with maximum effectiveness.

The principal component of operating expense being the train-mile, it has followed that the underlying principle of successful railway management has been to produce all of the transportation required in a minimum number of these units. Direct lines, with low grades, minimum total curvature and all curves of long radius, track and structures designed to the standard needed to carry maximum loads at maximum speeds with complete safety and minimum maintenance costs, comprise this *fundamental factor* in the railways' economics. The *second* is locomotives of appropriate horsepower and superior fuel and maintenance economy. The *third* is the adequacy of route and yard capacity and appurtenant facilities of all kinds, which together permit trains to be operated continuously at the maximum speeds possible for the heavier standard of trainload and enable all terminal services, for trains and engines, to be performed expeditiously and economically. *Fourth*, are the similar considerations concerning car design and construction.

Rates to Encourage Economical Loads

In the future the economies which can be obtained from very large freight cars, more heavily loaded, should be the controlling determinant of their dimensions, which probably should closely approach those of modern passenger equipment. Shipper co-operation should be sought by rate-making practices which will share the resultant operating savings with the patrons who help obtain them. This will provide the most practical encouragement to efficient car utilization and remove the tendency of sharp competition to decrease the lading per car. Containers offer the means of reconciling the wishes of shippers for smaller shipping units and the transportation requirements which underlie more economical operation.

Further development of the container should also be sought to lessen the expense of packing for shipment by rail.

The somewhat indefinite term "appropriate horsepower," which has been used in reference to locomotives, may be defined as the locomotive of the smallest horsepower necessary to move in single-engine trains, an average day's traffic based on minimum frequency of dispatching and the operating speeds required by competitive conditions. The theoretically desirable "appropriate horsepower" for moving all traffic on minimum frequency could, for heavy tonnage or heavy grades, require an engine of impossible size, and the upper limit must of course be established by such practical considerations as clearances, bridge and curve limitations, allowable drawbar pull which can be transmitted by the draft gear and couplers, the length of sidings on single track lines, the maximum length train which can be safely controlled by the conventional air brake equipment, and the size of turntables, enginehouse and shops.

Grades and curves are a principal ingredient of the railway problem because these introduce the increases in the operating costs and the speed limitations which, together, make railroad traffic vulnerable to external competition. While grades and curves will always remain, the more they can be reduced, the fewer difficulties the railway will have. In the long run, it is preferable

to reduce, or eliminate, grades and curves, where economically feasible to do so—and thus remove for all time the additional resistances which they interpose against train movement—than it is to ease the burden of these handicaps by massing greater (locomotive) forces to combat them, as important as it is to do that when traffic lacks the density necessary to justify the invariably greater capital cost of the superior alternative.

The elimination of adverse physical characteristics on heavy traffic routes followed by the use on such lines of "super-power" locomotives of maximum capacity, is the most effective method of securing low cost operation, provided, of course, that the capital expenditures necessary for the former improvement is justifiable and the required funds can be obtained. Low grades and easy curves should not be looked upon as a means of avoiding the necessity of using locomotives of maximum horsepower, but as the way to secure maximum trainloads and speeds from such engines. It should, therefore, be the goal of intensive development of primary routes to obtain minimum grades and curves and maximum locomotive power so that the full benefits which each can confer upon future operations will be simultaneously and permanently obtained. Low grades and "super-power" locomotives are the "Victory" combination for the American railroads.

Railways in this country were generally built to original physical characteristics of 1 per cent grades and 6 deg. curves, or slightly higher, save where favorable topography permitted better ones to be obtained with no important increase in original construction costs. (On mountain lines, much heavier grades and sharper curves were, of course, unavoidable.) In view of the limited capital initially available and the light traffic usually in sight at the outset, these route standards were sound practice then, but they entail too heavy expenses now for satisfactory main line operations. The laying of additional tracks on the heavier traffic sections in past years permitted a considerable amount of improvement in profile and alinement but the railways of the United States still have too small a proportion of their primary routes represented by engine districts on which ruling grades are 0.5 per cent or less and where curvature and bridge limitations do not introduce frequent restrictions in normal train operating speeds. Within the decade after the present war ends, competition will necessitate such fast and low cost operation that it will be imperative to develop the main lines so that their physical characteristics and facilities will permit 6,000-ton freight trains to be hauled by a single maximum capacity locomotive at average speeds of between 35 and 50 m. p. h., save, of course, over high mountain crossings, which however, must in many cases be materially revised and improved through use of long tunnels.

Transcontinental Passenger Service

All component parts of the railway plant and equipment must be synchronized with this speed and weight of freight train operation. This will permit the important passenger-carrying lines to step up average speeds sufficiently to permit 70-m. p. h. schedules between all large cities. Daily transcontinental passenger service may have to be introduced in order to retain the long-haul interline passenger movement through the principal east-west gateways. Competitive factors arising from the diversity of routes have in the past always appeared to be an impossible obstacle to establishing these, but the plan of pooling the Chicago-Florida runs established by several lines a few years ago should point the way to transcontinental trains which immediately after

the war can span the nation in 56 hours and in due course might make the run in less than 48 hours.

It has been my great privilege to have seen most of the primary and principal secondary route mileage of the railways of this country. I am sufficiently familiar with the country's railroad plant to appreciate the magnitude of the work which must be done to obtain the foregoing standards. The present railway plant represents an investment substantially in excess of \$20 billions. It will probably involve an expenditure of half again as much to convert these carriers into the intensively developed "mass production" transportation machines which I have termed "super-railroads," and ten years will be required for this transformation.

To Hold Traffic—Betterment Should Be Prompt

The indicated improvements should proceed rapidly in order to insure sufficient overall progress being made each year to protect railroad traffic from the serious erosion that will inevitably follow retardation in the rate of advance. Meanwhile, the railroads must strive to gain and continuously hold the public interest through utilizing technical developments as effectively and as promptly as competitive agencies appear to have done. The operating departments of any railroad can readily develop the details of plant and equipment improvements which together will produce the service standards and low operating costs essential to hold a proportion of postwar traffic that will represent a volume of business exceeding that of any peace year of the past. The sole obstacle to transforming these projects into actualities is the difficulty of paying for their cost. This matter of securing adequate capital generally has been the entire "railroad problem" of past decades. It follows that the public importance of satisfactory railway earnings largely results from the relationship between earnings and credit and capital. All railroad development is founded upon the latter, and it, in turn, is wholly dependent upon the two former factors.

Capital is money used for productive purposes and either represents income withheld from present security holders for reinvestment in the property, or is money obtained from new investors upon the credit of the company. Credit, in turn, represents the faith which investors have that money which they entrust to an enterprise will be utilized in a manner that will produce an operating profit out of which reasonable rates of interest or dividends can be regularly paid, while reserves are continuously being provided to restore the service life worn out of capital assets.

Fixed Plant Financing Is No Easy Problem

The capital which produced the railway systems fared badly during the decade of the '30's. Few companies could continuously obtain new funds on satisfactory terms, except through the sale of equipment trust certificates, to finance purchases of cars and locomotives on the installment plant. Unfortunately, no financial device is available to raise funds for fixed improvements with equal facility. These must be paid for out of surplus earnings or money raised on the credit of the enterprise.

Measuring the results of the period beginning January 1, 1930, more capital went out of the railroad industry than came into it; i. e., "on balance" the railroads disbursed more cash, derived through undistributed earnings, to pay off former investors than they obtained as new capital from other ones. The industry, considered as a whole, has been limited in its development to the

cash which it produced as depreciation charges to operating expenses. It is a great tribute to railroad management that with these relatively small sums the carriers accomplished such important developments of their plant and equipment since 1929. This should place in better perspective the vitalizing effect which wholly adequate future capital expenditures will have.

Last year's net railway operating income was \$1,500 millions. Unfortunately, this must be regarded as a wartime "windfall." One dare not predicate postwar railway development on a continuation of such earnings. However, if one billion dollars of sustained annual net railway operating income can be retained, through all postwar years, it, together with the "other income" derived from non-operating sources, would service a capitalization reasonably commensurate with the investment which produced the American railway system. The resultant income available for leased line rentals and fixed and contingent bond interest would provide a sufficient margin of safety for the payment of these charges to permit securities on which they were paid to sell around par. A balance of more than \$600 millions would remain after such disbursements to allow moderate dividend payments and provide over \$300 millions annually needed for reinvestment in the property out of surplus earnings. This would represent one-third of the yearly total needed over a decade to produce "super-railroads."

\$3 Billions of New Investments Will Be Needed

A like amount may be derived from depreciation charges which are now mandatory on specified portions of the fixed plant and structures, as well as on cars and locomotives. These funds provide cash for capital purposes in amounts offsetting the estimated service life lost through action of the elements and wear and tear of traffic on the units of property for which this deduction of cash is made through operating expense. Serial equipment trust certificates are usually amortized by using funds produced through these equipment depreciation charges and thereby gradually extinguish the debt incurred to buy some of the cars and locomotives against which these are currently accrued.

Fortunately the problem of financing acquisition of adequate numbers of new cars and engines through sale of equipment trust certificates presents no serious difficulties.

The development of the railway plant represents the larger capital requirement and also presents the principal financial questions. Over the next ten years, in excess of \$3 billions of new capital, in addition to the requirements for refunding maturing obligations, should be invested, in approximately equal proportions each year, to supplement the funds provided by surplus earnings, and either depreciation charges or sales of equipment trust securities to be serviced by these allowances of future years. While for the first few years, most of this last third of the total requirements would probably have to be raised through the sale of bonds, the financial benefits of the improvements being made thereby should so strengthen earning power and improve credit that financing by sale of stock should thereafter be feasible. Acquisition of funds on this basis would be the final test and evidence of the success of "super-railroads."

Existing junior issues of bonds must sell around par before new ones will be bought by investors, but stable earning power of \$1 billion per year would soon restore the credit of the American railways and re-establish the value of their bonds. In due course, continuance of satisfactory earnings (i. e., one billion dollars per year

in the postwar periods) would open up capital markets to the sale of new issues of railway bonds and stocks, and provide the final third of the annual billion dollar capital requirement. During the first postwar year or two, lingering public skepticism over the railway credit may prevent the necessary total additional new capital being acquired through security sales. During that period, such deficiencies in available new capital must be made up out of the cash surpluses now being built up in railway treasuries. It is very important that taxes shall not impose too heavy a handicap on the creation of these accumulations. Such future drafts for capital purposes on cash resources place a limit on the extent to which present surplus earning power should be monopolized by debt reduction programs, notwithstanding the attractiveness of purchasing bonds at large discounts.

No amount of capital expenditure will enable a railroad train to operate at airplane velocities, but the operating speeds of "super-railroads" would represent entirely satisfactory schedules for journeys of all lengths. The unit costs of "super-railroads" would permit competitively attractive fares.

The Most Economical Means to Better Transport

"Super-railroads" would also permit the carriers to provide freight schedules representing 35 m.p.h. service on a basis of elapsed time from initial to final terminal, and yard switching requirements would add a minimum number of hours to the road-haul time. Trainloads would approximate water cargoes in tonnage, and direct movement costs would be of similar amounts. Long-haul truck transport would lose, rather than gain, in proportional commercial transportation importance when "super-railroads" recover the advantage of both price and speed and are, of course, fully supplemented by co-ordinated motor terminal and local services to the necessary extent.

In both freight and passenger service, winning combinations of speed and price can be found that will insure "super-railroads" permanent and profitable retention of two-thirds or more of the internal commercial transportation of the United States.

The cost appears large, but represents only 50 per cent of the present investment and it would be distributed over an adequate period of years to hold the annual capital requirements within limits that can be provided entirely from the industry's own revenues and private sources of new capital. Everything is relative; and the sum of \$10 billions required to provide "super-railroads" is but a fraction of the sum that would be necessary to provide "super-highways," waterways, and airlines of much less capacity and aggregate public utility.

Maintenance Officers Ponder the Serious Shortage of Help

(Continued from page 765)

lation of man-days worked by these week-end workers, on Sundays, over the entire Pacific Lines.

Date, 1943	Man-Days
April 4	4,162
April 11	4,460
April 18	4,525
April 25	3,504
May 9	3,629
May 16	3,588

Subsequent drops occurred, due probably in large measure to annual vacations and to students obtaining full-time jobs during their vacation period. Adding to this, the seasonal demand for farm, vineyard and orchard workers, widely publicized in California, has reduced considerably the available pool of possible recruits.

Other departments are availing themselves of help from part-time or week-end workers, particularly the stores department, where they are used to load supplies, unload scrap, sort scrap, and to unload and load lumber. In our wood-working mills, a limited number are performing the simpler mill processes which do not require the use of power-driven tools, and some are employed in the manufacture of small pre-fabricated structures. In this case, if skills are discovered in the men, they are used to the best advantage, with consequent greater remuneration.

The work performed by these part-time forces has been satisfactory, but the plan must be considered as a relief measure only, and not in any sense as a complete solution of the labor problem.

* * * *



"4-F" Coach Re-classified as U.S.O. Center

Unfit for regular service on the Denver & Rio Grande Western, this old drover's coach was "spruced up" about a year ago, placed on a spur at the Alamosa, Colo., station, and a welcome sign was hung out for servicemen with time to spare between trains. The car, which was reconditioned in the Alamosa shops, is operated by the local chapter of the American Legion. Coffee, doughnuts, cigarettes and candy are supplied through the U.S.O.

Railroads' Record in 1944 Depends on Materials Allotted

A.A.R. spokesmen tell Congress of achievements unparalleled in transportation history—Warn that more rail and equipment must be provided quickly

WASHINGTON, D. C.

THE railroads cannot continue to perform miracles without materials—this was the conclusion left with a special Senate subcommittee investigating the railroad transportation situation by a group of officers of the Association of American Railroads who appeared before it to describe the wartime accomplishments of the industry and to stress its need for more equitable treatment by the War Production Board.

The investigations of the subcommittee of Senate committee on interstate commerce—made up of Senators Stewart of Tennessee, chairman, and Johnson of Colorado, Democrats, and Reed of Kansas, Republican—grew out of Senate Resolution 185, the purpose of which was noted in *Railway Age* of October 30, page 700, and which was a development from a proposal of Senator Langer, Republican of North Dakota, that the Senate should consider the car supply situation as it has affected the current grain movement from the Northwest. Hearings began on November 4 and continued through November 9, during which time a delegation of representatives of shippers and public officials from the Northwest area expressed their appreciation of the task the railroads had accomplished, but stressed their conviction that ill-advised actions of government agencies and the alleged inequitable distribution of available box cars under Circular CCS-10 of the A.A.R. Car Service Division had endangered the marketing of the 1943 grain crop of that region.

Government Red Tape Criticized

Through the statements of the several A.A.R. representatives the railroads put into the record a comprehensive and factually-supported report of their contribution to the war effort. Their serious concern with the allotments of steel for equipment and rail that have been provided so far by the W.P.B. was expressed particularly by Charles H. Buford, A.A.R. vice-president. Mr. Buford explained that, in general, the needs of the roads for maintenance materials, other than rail, had been met as well as wartime conditions permitted. During 1942 and 1943 allocations of steel rail, however, will "fall short of minimum replacement requirements by close to one million tons," he told the committee, adding that the roads obtained 78 per cent of their minimum needs in 1942 and only 73 per cent in 1943.

"Increasing transverse fissure failures in rails testify to the urgent need for more liberal allowances of new rails," Mr. Buford went on to say. "The number of detected transverse fissures in rail more than doubled between 1939 and 1942, increasing from 13,822 to 28,316. The number of service failures increased by 23 per cent during the same period. The derailment of trains because of failure of rail and rail joints increased progressively from 290 in 1939 to 631 in 1942."

Authorizations and deliveries of materials for the con-

struction of new cars and locomotives have been substantially less than needed requirements, Mr. Buford told the committee. Moreover, he explained, there has been much delay in the release of materials, so that the production of the equipment authorized has been retarded. While a lack of agreement between the O.D.T. and the W.P.B. as to whose responsibility it was to see that material flowed regularly to the equipment builders has, he said, recently been composed, "the matter can and should be further expedited. Once cars or locomotives are authorized for construction, and the work actually gets under way, the machinery for the furnishing of materials for such construction should be freed of unnecessary details and red tape. To do otherwise is to waste manpower, as well as to deprive the railroads of the prompt availability of the needed equipment."

Furthermore, said the A.A.R. vice-president, the railroads have not been able to extend facilities to the extent they should, in part because "before projects of this kind are undertaken, specific approval must be obtained from the War Production Board and the Office of Defense Transportation. Frequently, additional or subsequent approvals must be obtained from some unit of the Army or the Navy and from various sections and divisions of W.P.B. before the materials are released. The delay, duplication of effort, and multiplicity of conferences involved in this procedure further tax the limited time of railroad officials."

Another factor limiting railroad achievement is the critical shortage of men, the committee was told, and October 15 figures showed this shortage totaled 99,309 employees, of which slightly over 50 per cent was in track workers and other common labor. The shortage, Mr. Buford explained, results from the draft and from competition for labor from war industries using "suction" wage rates to attract men. "Illustrating the critical situation on the Pacific Coast," he continued, "the five major railroads serving that area recently reported that during a recent 10-day period 421 trains were delayed because of shortages in train crews and 242 yard crew shifts were not worked because of shortages of men."

The Shortage of Help

The war manpower situation has been badly handled with respect to the railroads, the A.A.R. vice-president said in answer to a question at this point, essentially because the roads have been classed as a civilian industry. "This is a war of transportation," he remarked, "and transportation cannot be carried on without men. Let transportation falter and everything else slows down—let transportation fail and everything stops."

M. J. Gormley, executive assistant of the A.A.R., opened the presentation of the railroads' war record. He gave the subcommittee an outline of traffic trends, of

changes in the car and locomotive supply, and of developments in operating efficiency over selected periods ranging from the current year back to the days of World War I, supporting his remarks with charts and tabulations. In this connection he pointed to the establishment of a new record in 1943 not only in the total freight movement, but in average tons per train, which will, he estimated, be about 1115 tons, as compared with 681 in 1918. As one striking measure of current passenger business, he pointed out that the roads in 1943 will move an average of 215 passengers per train, as compared with 79.51 in 1918.

How Car Movement Is Economized

Mr. Gormley's testimony was followed by that of W. C. Kendall, chairman of the A.A.R. Car Service Division, who discussed measures undertaken to conserve the car supply. After describing in some detail the work of that division, he elaborated upon recent accomplishments in handling refrigerator cars and in moving military and naval personnel and materiel. In the latter connection he pointed out how maximum efficient utilization of passenger equipment is obtained through the Army's cooperation in coordinating organized troop movements, which, he said, run from 150 to more than 200 per day. "Movements are scheduled as much in advance as possible," he explained, "and studies are made so that movement dates can be set ahead or set back where this is possible and where so doing will permit the use of equipment being released from troop movements into areas from which new movements are scheduled to be made. In one recent over-all plan involving the movement of five divisions, it was possible to work things out so that the five separate divisional movements could be handled with two sets of railroad equipment."

Similar discussions of the activities of the Tank Car Section in connection with the East Coast petroleum movement and of the Open Car Section in providing for unaccustomed commercial traffic in addition to large long haul military operations were presented in considerable detail by William E. Callahan and Caleb R. Megee, respectively, the managers of these Car Service Division sections.

At another meeting of the subcommittee Dr. Julius H. Parmelee, director of the Bureau of Railway Economics of the A.A.R., surveyed the effect of the wartime traffic developments on railway earnings and expenditures, putting particular emphasis on the deferred maintenance question. Expenditures of more than \$180 million on roadway and structures alone have been deferred in 1943, he pointed out, because of shortages of materials and manpower. "As a result of the great expansion of railroad traffic demands since 1939," he said, "the fixed plant and equipment have been subjected to unprecedented wear and tear. Physical depreciation and obsolescence have both been at work, and war conditions have made it impossible completely to cope with both those factors. What the carriers have done has been accomplished under severe handicaps. They have met all immediate needs, but they have been forced to defer some of the programmed work."

Dr. Parmelee also discussed recent achievements of the railroads in the reduction of outstanding indebtedness, giving the subcommittee statistical tables to support his summaries of the extent to which such debt reduction has accompanied large capital expenditures for additions and betterments.

At the subcommittee's request, the railroads presented

a statement in elaboration of the comment of Mr. Gormley that "traffic over inland rivers and canals was actually less in 1942 than in 1941, while in the same period railroad traffic increased by nearly 200,000,000 tons." Dr. C. S. Duncan, A.A.R. economist, supplied figures to show that there was an actual decline in 1942, as compared with 1941, of 416,494,000 ton-miles, or 1.6 per cent, in all domestic water-borne commerce, while in the same period the decline on the waterways other than those classed as "other waterways and canals and connecting channels," which were affected by an increase in Great Lakes traffic, amounted to 1,381,000,000 ton-miles. While there are various explanations for this decline in the face of wartime conditions, he told the committee, most important is the "obvious reason" that the waterways cannot serve the origin and destination of the war traffic.

The box car supply situation was discussed in some detail before the subcommittee by Ralph E. Clark, manager of the Closed Car Section of the A.A.R. Car Service Division, with particular reference to the complaints emanating from the Northwest of shortages and inequitable distribution. With the heaviest grain crop in that area since 1927, he pointed out, the railroads have moved to market from that territory some 30 per cent more carloads of grain than in 1942, despite the intense wartime demand for box cars all over the country and the unusual conditions in the grain market that disturbed normal car movements. In the country as a whole, he told the committee, during the first 43 weeks of 1943 the average weekly loadings of grain and grain products have exceeded the 1942 figures for the same period by 10,000 cars.

Mr. Clark acknowledged that the representatives of the northwestern states had some justification for their complaints, as the box car supply has not been adequate to fully protect requirements at country stations. Nevertheless, he pointed out, the receipts at primary markets "have been within approximately 150-200 cars daily of the ability of the terminal elevators to handle currently and without delay to the freight equipment, due to the shortage of labor to unload and bin the grain. There still remain approximately 600 country elevators, or approximately 15 per cent of the total licensed country storage facilities, whose operations are restricted by reason of shortage of cars. This is a reduction of 50 per cent compared with the peak on September 30."

Mr. Clark assured the subcommittee and the delegation from the Northwest that an effort would be made to revise Car Service Rule 10 before the next harvest "in an attempt to arrive at a rule which would reasonably meet the needs of the situation." Representatives of railroads serving this area also appeared before the subcommittee to explain the circumstances under which the grain car stringency had developed.

Railroads Don't Need Investigating

George H. Shafer, president of the National Association of Shippers Advisory Boards, told the subcommittee on November 9 that shippers throughout the country, as represented by these boards, consider railroad performance under present conditions as being excellent, and he spoke, he pointed out, with full understanding of the Northwest grain situation, since he was a resident of that area. There is no more need of investigating railroad performance, he declared, than of investigating MacArthur because he has failed to conquer Japan with the forces at his disposal. Minimum railroad equipment requirements have by no means been met, Mr. Shafer asserted.

Railroads-in-War News

116,000 Railroad Jobs to Be Filled Retirement Board counts that number of jobs waiting for takers

The Railroad Retirement Board estimates that the needs for additional personnel for the entire railway industry aggregate 116,000 persons as of October 1, compared with 107,000 as of September 1. The estimate is based on reports received from railroads which show that 99,309 persons are needed by the 190 lines reporting. The above estimates differ from the figures published in previous summaries of the board in that they have been adjusted for changes in the number of employers reporting and to allow for the personnel needs of non-reporting employers, whereas the previous data issued by the board consisted only of the figures reported to the board each month.

According to the board, during September, railroad labor shortages became more grave in all parts of the country, except the South. Adjusted figures for previous months show that shortages on October 1, 1943, were approximately 80 per cent higher than in mid-September, 1942, and except for a reduction in the winter months and in June have become persistently worse.

From January to August, employment on the railroads reporting increased 75,000 while the number of unfilled jobs was 44,000 higher. Needs on October 1 exceeded those of September 1 in each of the six employee groups, the board reports. The largest rise was nearly 4,000 in maintenance of way and structures which reflects mainly a similar increase in the need for additional section laborers. The needs for extra-gang laborers, however, were somewhat easier. Contributing to contrasting movements of the two kinds of maintenance of way laborers are the beginning of a shift in emphasis to fall and winter maintenance work in some areas and the inability to get sufficient men to maintain extra gangs in other areas. There were also needs for a few hundred more helpers for building artisans. In the maintenance of equipment and stores department needs were 2,400 more. In this group the largest changes were for shop and stores laborers, carpenters, and helpers and apprentices. Although needs in the transportation group were only a little over 100 higher, the number of jobs open for brakemen was about 180 higher, as was the total for baggagemen and mail and baggage handlers.

Employee Group	Needs Reported		
	Number	P. C. of Total	Surpluses Reported
I Executive, official, and professional	218	0.2	0
I Clerical	2,094	2.1	0

A Mission to India

Col. J. A. Appleton, who was formerly general manager of the New York zone of the Pennsylvania and is now in the United States Army, and R. J. M. Inglis, divisional manager of the London & North Eastern (of Great Britain), will shortly pay a visit of a few months' duration to India, at the invitation of the government of India, in order to place their experience and advice at the disposal of the Indian Railway Administration, it was announced November 10 by the Foreign Economic Administration. The Army, at the request of the F.E.A. has agreed to assign Colonel Appleton, and the London & North Eastern has agreed to release Mr. Inglis for this purpose.

III Maintenance of equipment and stores	28,829	29.0	0
IV Maintenance of way and structures	52,260	52.7	4
V Transportation	15,281	15.4	133
VI Miscellaneous	627	0.6	28
Total	99,309	100.0	165

Army Saves Freight Cars and Freight Bills

The Army is conserving freight cars by avoiding transfer of motor vehicles when troops are moved, if inquiry develops that there is already enough such equipment at destination for an outfit's requirements.

When a regiment or a division was transferred from one Army post to another, it was formerly the custom to transfer its vehicles and trucks along with its other equipment to the new station. By working out a plan with the Army Ground Forces through which advance knowledge was obtained of contemplated troop movements, the Field Service Division of the Ordnance Department, Army Service Forces, ascertained if there would be sufficient equipment available at the new station so that the troops would not have to take their vehicular equipment with them. In almost every instance in the past ten months this was found to be the case. As a result, 22,000 fewer freight cars were required for troop movement—a saving of approximately \$6,500,000 in freight bills.

At first the reserve supply of equipment was small. As the plan got into operation and troops were transported to new stations without their vehicles, the stockpile grew "like a snowball," and it is becoming increasingly possible to save money and release freight cars for other uses. Originally only motor vehicles were involved but now the plan is being expanded to weapons which are available at the new post.

Gross Tells Feats of Army R.R. Men

Increase railway capacity in N. Africa 70%—Move half of Russia's U. S. supplies

The job being done by America's Military Railway Service overseas "is contributing in large measure to the great gains that have been and are being made by the Allied forces," Major General Charles P. Gross, chief of the Army Transportation Corps, who has just returned from a 45,000-mile tour of some of the fighting fronts, declared November 10 in a round-table discussion over the Mutual Broadcasting System.

"For instance," General Gross said, "our railroaders increased the capacity of the French railroads in North Africa by some 70 per cent. They advanced with the troops in the invasion of Sicily, and are now in Italy restoring rail operations behind our front lines from Naples and Salerno. In the Persian Gulf Corridor, they increased railway capacity from practically nothing to some 130,000 tons a month, thereby getting to Russia half of the supplies which are covered in the protocol agreement for that route."

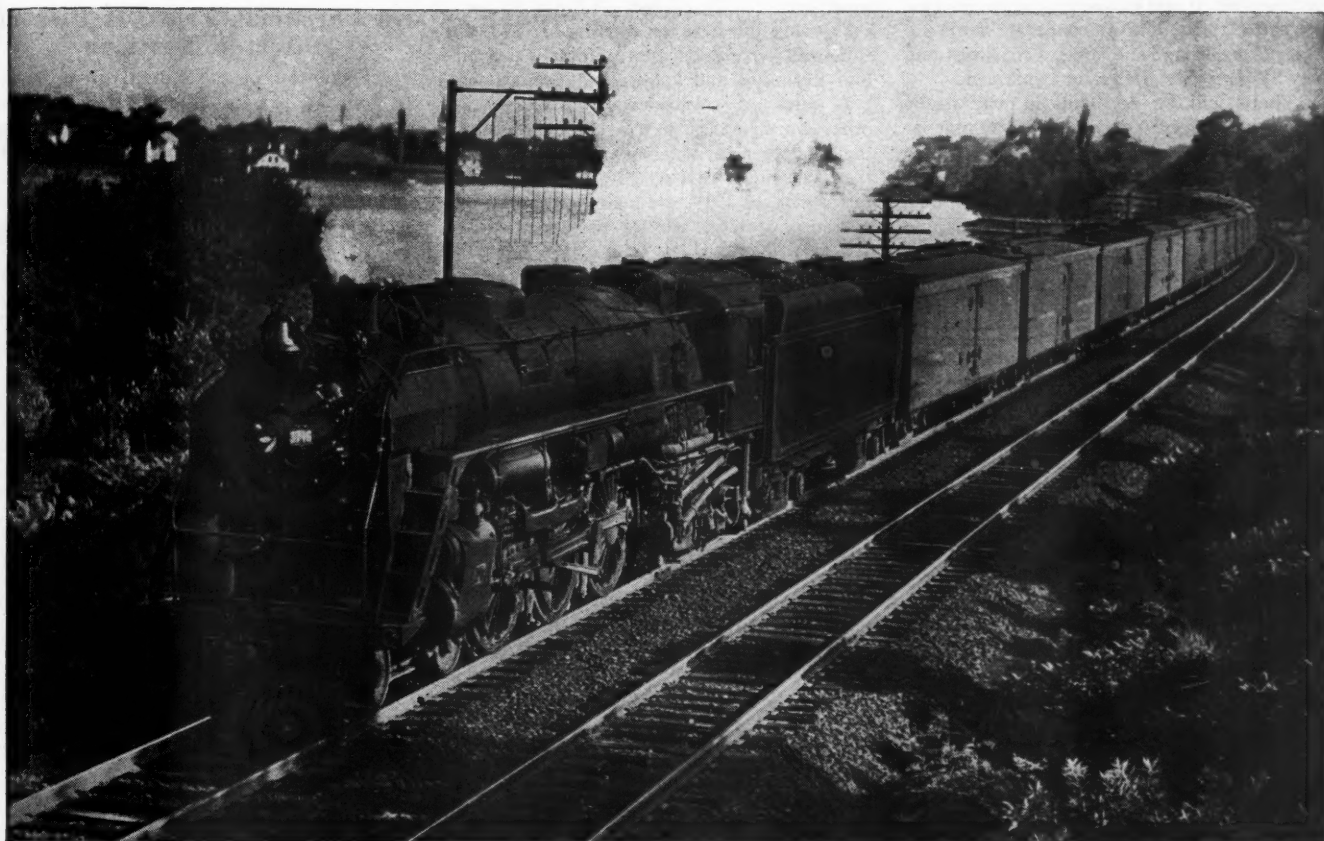
Although railroading in the fighting zones is very difficult, General Gross commented, "our men are tackling it with ingenuity, courage and determination." "Some notable feats of valor," he added, "have been performed in this war by our railroaders in getting to the front the men and supplies which must reach there if our armies are to be victorious."

Troop movements, according to General Gross, account for about 20 per cent of the total passenger-miles of the American railroads. So far in this war, he reported, the railroads in this country have carried about three and a half times as many troops in special trains and special cars as they handled in similar movements during the entire 19 months the United States was in the last war.

On the freight side, General Gross disclosed, the railroads have hauled more than five times as much Army freight and express as they did in the last war, and are now moving more than nine-tenths of all Army freight tonnage.

Joseph B. Eastman, director of the Office of Defense Transportation, declared that the railroads are doing a "superlative" job in taking care of civilian needs, and he expressed the opinion that the railroads will be able to handle a still heavier load "provided they can get the equipment and the men they need, and provided even more efficiency can be gotten out of the railroad."

LIMA LOCOMOTIVES HELP THE B. & M.



MOVE MORE WARTIME FREIGHT IN FEWER CARS

The wartime service rendered by the Boston and Maine covers a vitally important strategic area, linking as it does our own war effort with the Maritime Provinces and the Atlantic embarkation ports of our ally, Canada. The B. & M. is now handling oil at the rate of 120,000 car loads a year, and other unusual all-rail movements are coal, raw sugar and cotton.

As a measure of locomotive service on the B. & M. it may be noted that, while the daily average number of freight cars on line decreased by 2.6%, the net ton-miles actually increased 36.4%. For many years Lima Super-Power Steam Locomotives have helped the Boston & Maine to serve busy New England as they are now helping it to serve this important segment of the war effort.

LIMA LOCOMOTIVE WORKS



INCORPORATED, LIMA, OHIO

plant." "This," he maintained, "will require the utmost effort and cooperation on the part of all who have anything to do with transportation."

The general public, Mr. Eastman said, can help the transportation situation and avoid "rationing" of travel by refraining from taking unnecessary trips and by adjusting their travel habits to war necessities.

Urging the public to cooperate with the transportation agencies over Christmas and New Year's, Mr. Eastman explained:

"There will be no letup in war traffic over the holidays. Troops and war materials will continue to be moved, and people will have to travel on war business. Then, too, thousands of servicemen and women will be going home for the holidays, and we want to do everything possible to accommodate them."

John J. Pelley, president of the Association of American Railroads, stated that although it takes all forms of transportation to wage a modern war, "by far the biggest part of the job, the most essential part, is that done by the railroads.

"In normal times," Mr. Pelley said, "the

railroads carry about 60 per cent of America's commercial freight and passenger traffic. Today, they are handling more than 70 per cent of the total freight and passenger business of the country."

Declaring that the load which has been placed on the railroads since the war began has grown to tremendous size, Mr. Pelley went on:

"During the first ten months of 1943, the railroads performed approximately 608 billion ton-miles and about 72 billion passenger miles of transportation service. In other words, railroad freight business during that period was two and one-fourth times as much as it was in the corresponding period of 1939, the year war broke out in Europe, and railroad passenger traffic was nearly four times as much.

"It is now apparent that during the entire year of 1943, the railroads will carry more freight and passenger business than they did in 1918, the peak year of the First World War, plus the whole year of 1939."

Albert R. Beatty, manager of the A.A.R.'s Publicity Section, who acted as moderator of the program, concluded the broadcast by

* * * *

saying that "it is evident that the railroads are meeting the nation's transportation demands in this war. It is evident, too, that with the fullest cooperation of those who use them, and with the added equipment and men they must have, our railroads can be depended upon to continue keeping vital traffic moving."

No Christmas Trips, Is Plea of Director Eastman

All agencies of the federal government, as well as private employers throughout the country, have been asked by Director Eastman of the Office of Defense Transportation to refrain from granting vacations or time off to their employees between December 17 and January 10, where such leave would result in travel.

He had also asked both government and business to make special efforts to curtail business travel during the same period, in all cases where it can be deferred without impairing the war effort.

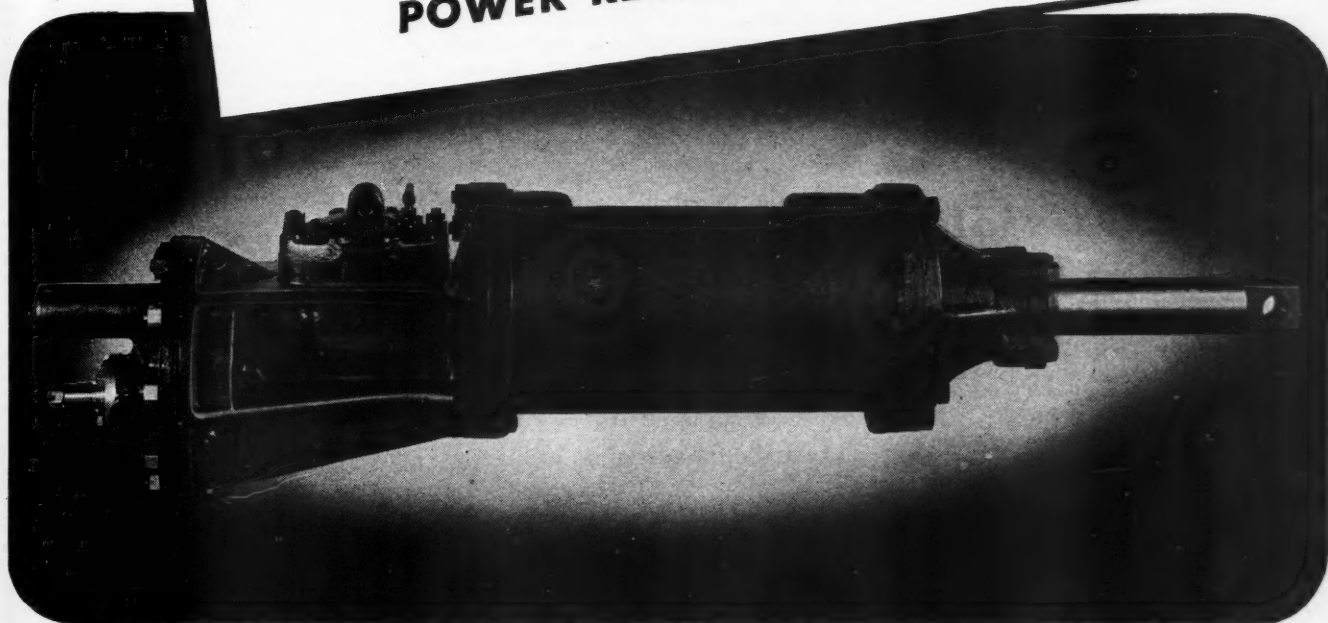
At the same time all government agencies were requested to refuse to permit representatives to speak at conventions or similar



C. B. & Q. Officers Visit Burlington's Army Railroaders at Camp Thomas A. Scott, Fort Wayne, Ind.

The 745th Railway Operating Battalion, most of whose officers and many of whose enlisted men are Burlington employees (hence known popularly as the "Burlington Battalion") was visited recently by seven C. B. & Q. officers interested in the progress of the unit. Seated, Left to Right: Capt. Lewis H. Ashby (former general foreman, North St. Louis); Executive Vice-President Edward Flynn; President Ralph Budd; Lt. Col. William P. Wilson, commanding officer (former C. & S. superintendent at Denver); Capt. William S. Kerr (former trainmaster, Casper, Wyo.); Raymond B. Gavin (former trainmaster, McCook, Nebr.); Robert D. Walker (former assistant to superintendent of relief and employment); Assistant Vice-President H. C. Murphy; and, 1st Lt. Stark E. Tracy (former welding supervisor, Chicago). Standing: H. J. Hoglund, assistant to executive vice-president; K. W. Fischer, assistant to president; H. H. Urbach, mechanical assistant to executive vice-president; and J. T. Williamson, personnel director. Other 745th officers formerly associated with the Burlington, and not shown in the photograph, are: Capt. Walfrid F. Jahr (roadmaster, McCook, Nebr.); Frank S. Palecek (chief clerk to storekeeper, West Burlington, Ia.); 1st Lts.: Ivan A. Frakes (car inspector foreman, Galesburg, Ill.); Orlen W. Nelson (system signal foreman, Chicago); Earl S. Hendricks, Sr. (locomotive engineer, Chicago); and, 2nd Lt. Daniel J. Lynch (assistant trainmaster, Sterling, Col.).

GET MAXIMUM WORK FROM
EVERY POUND OF STEAM — USE
THE FRANKLIN PRECISION
POWER REVERSE GEAR



The micrometer accuracy with which the desired cut-off may be obtained and maintained, makes the Franklin Precision Power Reverse Gear particularly valuable under today's difficult operating conditions.

Because cut-off adjustment is made easy, the engineman is encouraged to keep the cut-off adjustment fitted to every change in operating conditions. This helps materially to save fuel. It also does away with much unnecessary hard physical labor, and lets the engineman devote his uninterrupted attention to the efficient operation of his locomotive.



FRANKLIN RAILWAY SUPPLY COMPANY, INC.
NEW YORK • CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

meetings held between the dates indicated.

"Between now and the end of the year," Mr. Eastman explained in a letter conveying these requests, "the Office of Defense Transportation, in co-operation with the carriers, will intensify its continuing campaign for voluntary curtailment of unnecessary civilian travel. It will urge all civilians to forego holiday trips and, so far as possible, to abandon or defer all other journeys on trains or intercity buses between mid-December and mid-January. The armed services themselves will co-operate to lighten the travel load during this critical period by limiting the number of furloughs granted at all camps and stations."

In order to "hold down the rise in travel that normally occurs during the Christmas and New Year holiday period," the co-operation of business and the government agencies and their employees "will afford effective and substantial assistance to those

charged with the responsibility of meeting transportation obligations imposed by the war," the letter pointed out. "Such assistance is vitally needed and will be deeply appreciated."

Solder Restrictions Eased

The War Production Board on November 3 issued its General Preference Order M-43, Amended, relaxing restrictions on the tin content of solders where it has been found that higher tin content is necessary. Previously this higher content could be obtained only upon the granting of an appeal, with all the paper work and delay involved, but specific provisions of the amended order permit higher tin content, in some cases above 21 per cent, it was explained, for certain solders, since a survey is said to have shown that use of the higher tin content solders now permitted will actually result in a saving of tin.

Materials and Prices

The following is a digest of orders and notices of interest to railways, issued by the War Production Board and the Office of Price Administration since October 25.

Busways—General Limitation Order L-273 (Busways), as amended October 26, provides that wherever Form PD-834 was formerly required a letter in triplicate shall now be used.

Conveying Machinery—Provisions requiring authorization of engineering services, bids and estimates, and placement of purchase orders are removed from Order L-193 (Conveying Machinery and Mechanical Power Transmission Equipment) as amended October 26. This equipment is now being scheduled under General Scheduling Order M-293. Prospective purchasers are no longer required to file Form WPB-1593 (formerly PD-681).

Copper Scrap—Supplementary Order M-9-b, has been amended, to provide that generators of copper scrap amounting to 5,000 lb. (previously 500 lb.) or more per month shall report on Form WPB 452. In no event shall any person keep on hand more than a 30-day accumulation unless such accumulation aggregates less than one ton.

Electrical Instruments—Limitation Order L-203, covering electrical indicating instruments, has been amended to conform the order with General Scheduling Order M-293. As the result of the recent amendment of Order M-293, electrical instrument scheduling is now being done under two orders, and this amendment will provide the proper correlation and cross reference.

General Industrial Equipment—General Limitation Order L-172 as amended October 26, deletes scheduling provisions formerly imposed by the order. These provisions are now contained in General Scheduling Order M-293.

Lubrication Equipment—Simplification and standardization of more than 500 types of lubrication equipment are established by General Limitation Order L-314, which restricts production to specified models, styles and sizes and the use of certain critical materials and controls distribution. Schedule A of the order covers general purpose lubrication equipment; Schedule B, special purpose lubrication equipment; Schedule C, lubrication fittings; Schedule D, oil and grease cups and receptacles; and Schedule E, hand oilers.

Metal Pipe—Pre-fabricated pipe has been designated an unclassified product subject to the terms of General Scheduling Order M-293.

Naphtha—Petroleum Administration Order No. 18 bans the use of naphtha in the operation of motor vehicles and motor boats to prevent shortages in certain areas.

Paint—To relieve difficulties in formulating gloss finish paints, Order M-332 has been amended to permit 2.5 lb. of oil per gallon of paint to be used in manufacture instead of 1.75 lb.

Steel Shipping Drums—Order M-255 which controlled the allocation of new steel drums, has been revoked and its provisions have been incorporated in Order L-197, to provide more positive control over the distribution and use of new steel drums, which are becoming scarce, and to divert them to the most essential uses. Buyers will now use one official form, (WPB-3233), instead of the two or three previously required.

Schedule A of Order L-197 lists more than a hundred products. Those marked with an asterisk may be packed in old used steel drums, while unmarked items may not be packed in steel drums.

Wiping Cloths—MPR No. 484 (Unwashed and Washed Wiping Cloths) effective October 18, or November 2, at the option of each individual seller, provides specific cents-per-pound ceilings and streamlined specifications of grades for both unwashed and washed wipers. Fifteen days' operation under the former individual ceilings is permitted so that there will be no interference with the distribution of material already packed.

Vitrified Clay Sewer Pipes—Revised MPR 206, effective October 25, maintains the level of current maximum prices for vitrified clay sewer pipe and allied products, brings all manufacturers in the industry under a single price regulation, and establishes specific maximum prices for manufacturers in the West Central, South Central, Rocky Mountain and Pacific areas as well as continuing without change the maximums set for the three other producing zones.

Hitherto, manufacturers' price ceilings for clay sewer pipe and related products were established for the Eastern, Southern and East Central areas of the country by MPR 206. Producers in the other areas were subject to formula prices set by MPR 188 (Manufacturers' Maximum Prices for Specified Building Materials and Consumers' Goods Other Than Apparel) and the general MPR.

Established as maximums for each area are the highest prices prevailing in it during the period from October 1 to October 15, 1941. The regulation continues to treat each area separately. The revised regulation's price lists contain references to standard, double strength and "ASTM" types of products. Products which do not meet the specifications set by the industry for these grades and standards are not covered by the action and remain under the pricing provisions of Regulation 188.

The revised price measure provides for pricing of material equal to the 1941 quality of each manufacturer's products. If the quality of a product is improved or lowered, it is to be treated as a "new" product and priced under Regulation 188. Shipments which do not originate at the factory will continue to be priced under Regulation 188 and the general MPR.

Track Accessories—In a letter dated October 19, and addressed to all railroads and transit operators under Order P-142, G. M. Cornell, deputy director, Transportation Equipment division, WPB

calls attention to certain reclassifications. Commencing January 1, 1944, frogs, crossings, switches, switch stands, rail anchors, rail braces, guard rails and guard rail clamps shall be ordered by preference rating under the money value authorization in Section E of Form WPB-2585 and will be known as "track materials". Thus a complete switch or a part of a switch, such as a switch point or a slide plate, will be order by preference rating and not as a controlled material.

Only the following four items, rail joints, track spikes, tie plates and track bolts will remain as track accessories under controlled material, Code 2026.

Prices

Bituminous Coal—Amendment No. 69 to MPR No. 120 (Bituminous Coal Delivered From Mine or Preparation Plant), effective October 30, extends the time limit in which producers of bituminous coal, selling at minimum prices established under the Guffey Coal Act instead of at OPA maximum prices, may file applications for adjustments in their ceilings.

This time limit, which on August 23, was set as of October 23, 1943, is now established as of December 31, 1943. Producers may continue selling at the Guffey Coal Act minimums instead of OPA maximums until that date also.

At the same time OPA said it would issue, within the next few days, companion amendments to the dealer and bunker coal regulations permitting bituminous coal dealers and all sellers of bunker coal to sell at the Guffey Coal Act minimums until December 31, 1943, where they are higher than OPA maximums established.

To prevent diversion of railroad fuel from one railroad to another in district No. 12 (Iowa), two changes also were made by OPA in the provisions governing ceilings of railroad fuel in that area. The ceilings shall continue as applicable minimum prices as on April 1, 1942, but without adjustments on account of price exceptions, freight differentials and substitutions. The second change is that where a mine is on-line to more than one railroad, the highest Guffey Act minimum price is the maximum OPA price.

Machines and Parts—In accordance with Amendment No. 101 to MPR No. 136 (Machines and Parts and Machinery Services) effective November 1, the following new items previously covered by either MPR No. 188 (Manufacturers' Maximum Prices for Specified Building Materials and Consumers' Goods Other Than Apparel) or the general MPR, are now added to MPR No. 136, as amended (Machines and Parts and Machinery Services):

Dressers, abrasive wheel (except diamond dressers).

Pipe and tube tools, manually operated, including beading, bending, cleaning, cutting, expanding and flaring and wrenches for operating. Jacks and jack screws, manually operated.

Tools, manually operated for the cutting, forming and punching of metals.

Vises, all types; vise mounts, stands and supports.

Springs (except springs subject to Section 1390.32, Appendix A, of this regulation, and bed and furniture springs subject to MPR No. 188, MPR No. 213, and MFR No. 380).

Wheels (except those specially designed for military use and subject to Section 1390.32, Appendix A, of this regulation, RPS 6, MPR No. 246, and MPR No. 452).

X-ray equipment.

The general level of prices for the above items will not be affected, OPA pointed out, as their base date under Appendix B of the machinery regulation to which they have been transferred and the base date of the regulations previously covering them is March 1942.

Stock Millwork—Jobbers who customarily price stock millwork by use of a list price and discount sheet are authorized by Amendment No. 2 to MPR No. 293 (Stock Millwork) effective October 26, to use their usual method of pricing in passing on to buyers the recent three per cent increase in manufacturers' ceiling prices.

On sales other than combination doors, if the jobber's customary method of pricing is by use of a list price and a discount sheet, he may shorten his discount by the number of half-points which will most nearly approximate the amount by which the current net costs of a stock millwork item exceeds his August 1, 1943, net cost of the same item.

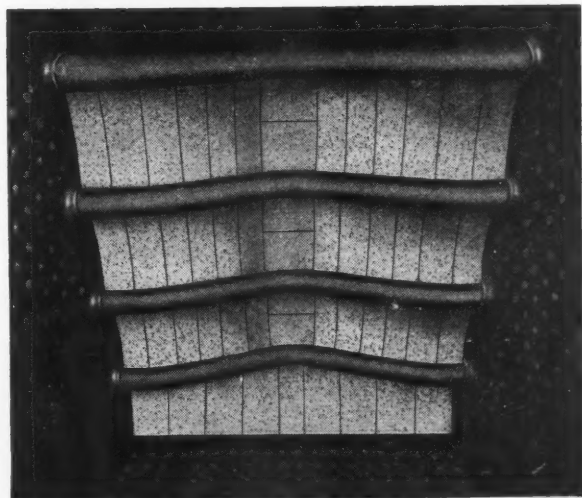


COAL CONSERVATION

HAS A NEW IMPORTANCE

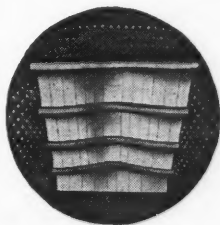
When you burn a ton of coal today you are burning the man-hours used in mining, transporting and handling it. Man-hours that are needed in the war effort.

So today coal conservation takes on a new importance. One way of furthering it is to be sure that every locomotive leaving the roundhouse has a *complete* arch in its firebox.



**HARBISON-WALKER
REFRACTORIES CO.**

Refractory Specialists



**AMERICAN ARCH CO.
INCORPORATED**

60 EAST 42nd STREET, NEW YORK, N. Y.

*Locomotive Combustion
Specialists*

GENERAL NEWS

Talk "Enterprise" But Act Socialism

Orators for private business
are doing nothing to block
socializing transport

Despite the fact that in America, during this war, private enterprise has written the most brilliant pages in all its history—there exists here a powerful movement for substituting government enterprise for private enterprise; and this movement is aided and abetted by many leaders of private business.

So declared Samuel O. Dunn, chairman of the Simmons-Boardman Publishing Corporation and editor of *Railway Age*, in an address at Davenport, Iowa, on November 3, on the occasion of an Army-Navy "E" award to the Davenport-Besler Corporation.

"Since our government began its preparations for war in June, 1940," said Mr. Dunn, "millions of men have been diverted to the armed forces, and yet the output of our factories and mines has doubled, transportation of freight by railroad has slightly more than doubled, and transportation of military and civilian passengers by railroad has quadrupled. The annals of mankind record no achievement remotely approaching this.

"During the war government has invested billions in manufacturing plants. Business, in resisting the trend toward state socialism, is demanding that after the war government shall refrain from operating these plants itself, and from allowing them to be operated by anybody in subsidized competition with plants owned by private capital. But before the war, the government had invested billions in means of transportation—inland waterways, highways, airports and so on—that have been used in competition with the railways. Is business, including manufacturers, now unanimously demanding that carriers using waterways, highways and airports built, or to be built, with government funds shall be required in future to pay sufficiently for the use of such facilities fully to reimburse the taxpaying public for providing them?

"On the contrary, we see being carried on a great campaign by *business interests* for post-war government expenditures of at least \$5 billion a year on 'public works'—principally waterways, 'superhighways', and airports, which would increase competition with the railways. But not a word is being said by spokesmen of these business interests in favor of requiring users of transportation facilities provided by government to pay enough for their use to (1) avoid burdening the taxpayers, (2) prevent economically unwarranted government spend-

Deferred Maintenance Not Being Charged

Although shortages of materials and labor are forcing the railroads to postpone much roadway and track maintenance which they ought to be doing to keep their property intact, they are neglecting to charge in their current statements of operating expenses the money this work is going to cost them. The reason for this failure is that the Treasury will not permit them to make such deductions in calculating their taxable income.

The railroads are thus forced to show "profits" at a higher figure than they actually are, and to pay wartime taxes on these mis-stated "profits". Proper maintenance is one of the expenses incurred in earning present income and should be charged when incurred—whether the actual work is done now or later. The Treasury, however, discourages the railroads from such honest bookkeeping.

The result is that for the first 9 months of 1943 (as revealed by the monthly review of the I. C. C.'s Bureau of Transport Economics and Statistics) the railroads as a whole accumulated only \$543,469 in their "deferred maintenance" accounts. To another account, in which should appear the cost of heavy repairs due on locomotives because of mileage run (but not yet made because the engines are too busy), only one of the large railroads made any charges in the first three-quarters of 1943.

ing, and (3) prevent subsidized competition with the railways.

"The railroads are as strictly a private enterprise as any other industry. They have rendered as great a service during the war as any industry. They cannot withstand government-subsidized competition any better than any other industry, Government-subsidized competition in transportation tends as strongly toward state socialism as would government-subsidized competition in manufacturing or any other industry. Why, then, do some powerful business groups persist in promoting wholesale government-subsidized competition in transportation, while opposing it in other industries, and while even pretending to be 100 per cent for private enterprise?

"Business men cannot reasonably expect our system of private enterprise to be preserved if some of our most important industries are to continue to be driven toward state socialism by the active co-operation of certain powerful business groups with advocates of state socialism."

Wallace Is Shown Error of His Ways

Transport Assn. suspects Thurman Arnold ghosted rabble-rousing Dallas speech

The address of Vice-President Wallace at Dallas, Tex., on October 20, was characterized by the Transportation Association of America, in a letter sent to members of Congress, members of the association and farm, trade and civic organizations on November 6, as "the most distorted representation of the true public interest in the transportation problems which has ever been uttered by a high public official of this country."

"We cannot believe that Mr. Wallace would deliberately lend himself to misstatement," the letter continues. "As he is not a transportation 'expert', we must conclude that his address was prepared by some one else. The diction is familiar; it sounds like a statement prepared by Thurman Arnold and filed by the anti-trust division of the Department of Justice with the Senate Interstate Commerce committee last spring.

"Its misrepresentations are, therefore, only important because they emanate from the Vice-President of the United States. From one holding a position of such great trust, the public has a right to expect statesman-like portrayals of national issues. But there never has been a greater distortion of the true position of the transportation industry.

"Whether or not he knew it, the 'plot' which Mr. Wallace discovered was this association's national transportation policy;—a program designed and supported by a membership representative of all elements of the national economy, 80 per cent of which are patrons of transportation services,—shippers and consumers. Of the 48 members of the board of directors who formulated this policy, only 3 represent the railroad industry. It is not a railroad program. Its principles were long ago advocated by the American Bar Association and other competent authorities. We advocate competitive transportation systems,—rather than hundreds of separate companies, each attempting to perform profitably its particular water, rail, highway or air services. We want competition,—and plenty of it,—between such transportation agencies. We have referred to this program as 'competitive integrated systems.'

"In order to concoct the charge that we promote regional monopolies, Mr. Wallace, or whoever wrote his speech, left out the word 'competitive' before the phrase 'in-

(Continued on page 780)

Superheated Steam

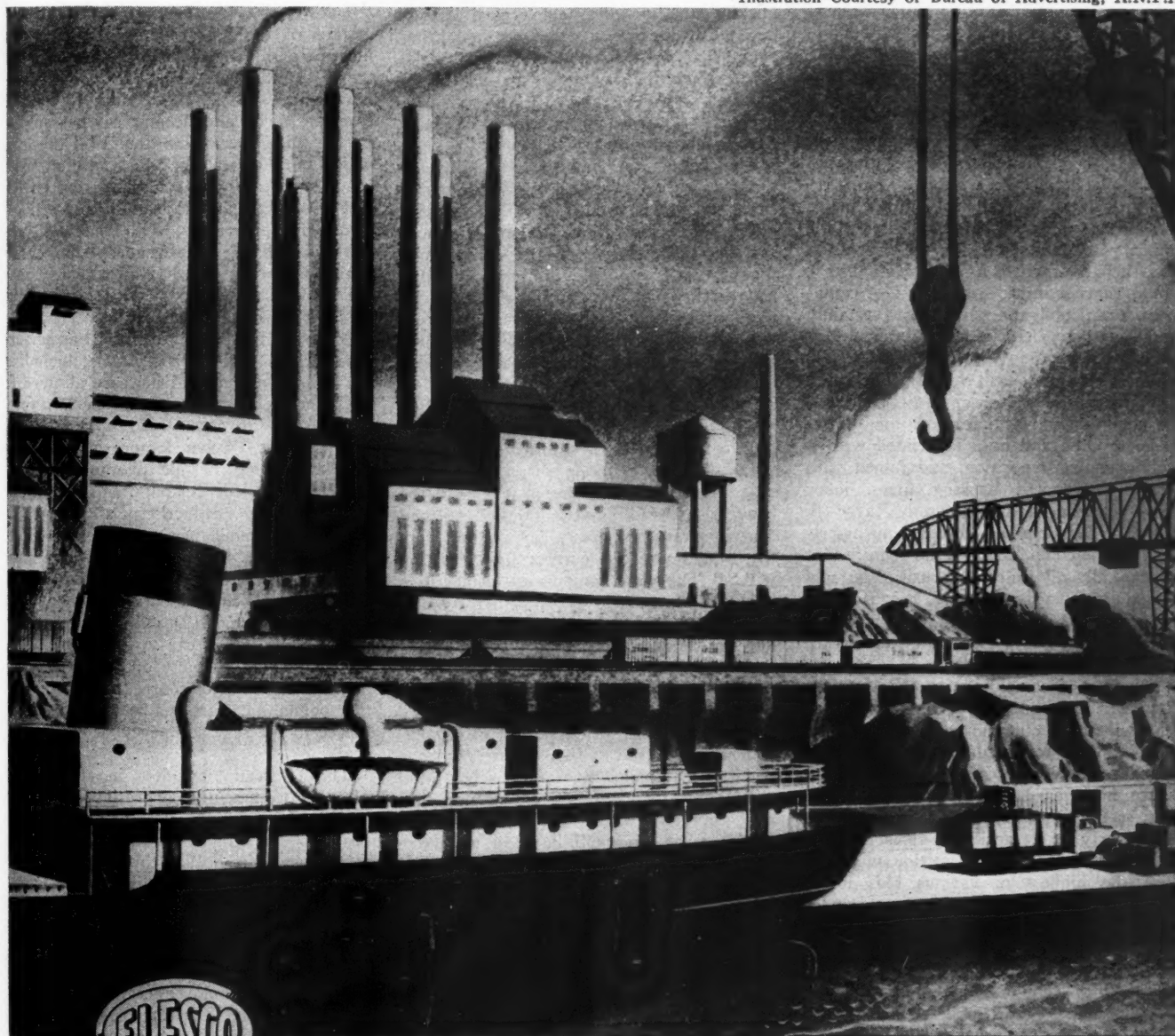
Has Contributed to Our Nation's War Efforts

Locomotive, marine and stationary steam power plants operate with fuel economies up to 35% or an equivalent increase in power output . . . due to the efficiency of superheated steam.

This appreciable saving of fuel, or the equivalent increase in power, have reached large proportions, and are important factors in our war effort.

Keep abreast of superheater improvement with Elesco.

Illustration Courtesy of Bureau of Advertising, A.N.P.A.



SUPERHEATERS • FEEDWATER HEATERS
AMERICAN THROTTLES • STEAM DRYERS
EXHAUST STEAM INJECTORS • PYROMETERS

THE
SUPERHEATER
C O M P A N Y

Representative of
AMERICAN THROTTLE COMPANY, INC.
60 East 42nd Street, NEW YORK
122 S. Michigan Blvd., CHICAGO

Montreal, Canada
THE SUPERHEATER COMPANY, LTD.

Hears Arguments on Competitive Bidding

I.C.C. takes question "under advisement" after both sides are discussed

The Interstate Commerce Commission, after devoting November 5 to hearing arguments supporting and opposing compulsory competitive bidding in the sale of railroad securities, took the question under advisement.

The arguments followed the submission of briefs in the commission's Ex Parte No. 158 proceeding, the general nature of which was indicated in *Railway Age* of September 18, page 465.

The position of most of the railroads upon the proposal to require competitive bidding was stated to the commission by John Dickinson, general counsel of the Pennsylvania, who appeared for the Association of American Railroads. The theme of Mr. Dickinson's argument was that there not only is no actual evidence for supposing that competitive bidding would result in yielding the railroads higher prices for their securities, but there is on the contrary a sound basis for the conclusion that such a practice, if made compulsory, would (except in the special case of equipment trust obligations) almost certainly result in their yielding less to the issuing company.

While this statement by Mr. Dickinson represented the views of most railroads, the commission was informed, the Chesapeake & Ohio and lines associated with it took a contrary position, and joined with certain investment banking firms, labor union spokesmen, and Senator Harry S. Truman, Democrat of Missouri, in asserting that the commission should require that substantially all railroad securities be sold through competitive bidding, because such a requirement would be in the public interest and would benefit the owners of the roads.

The idea of compulsory competitive bidding, Mr. Dickinson argued, is based on the assumption that the way to obtain the highest price for securities is to compel them to be sold at public auction. Experience, however, he said, teaches that auction sales frequently result in disposing of property at a sacrifice. It is true, he went on to say, that an auction will produce the highest of various bids under the particular terms or circumstances under which it is conducted, but this is not necessarily as high a price as might have been obtained from some other method of sale. The law of supply and demand strongly influences the prices realized from such sales, he pointed out, and in a falling market sacrifice sales, or a complete lack of offers, may be expected. "There is no statistical evidence to refute [this experience] in the special case of competitive bidding for railroad securities," he declared.

The Pennsylvania's counsel then pointed out that in the period of 1925 to 1930, the average annual interest cost to the rail-

roads upon equipment trust certificates, which were sold through competitive bidding, declined 7.6 per cent, while the average annual interest cost for bonds marketed through negotiated sales declined 12.5 per cent.

The fact that Halsey Stuart & Co. of Chicago and Otis & Co. of Cleveland, Ohio, the investment banking firms supporting the compulsory bidding principle, in recent finance cases before the commission, including the Erie and Pennsylvania, Ohio & Detroit refinancing transactions much discussed in this connection (reported in *Railway Age* of March 20, page 602, and July 31, page 224, respectively), submitted bids more favorable to the railroads than those secured through private negotiations does not prove that open competitive bidding generally would result in a better price to the issuing road, asserted Mr. Dickinson. In these "not typical" cases, he added, these firms before submitting a bid "had the advantage of knowing the price which the buyer in the negotiated sale had agreed to pay. All Halsey Stuart had to do to prove the merits of competitive bidding was to top that price."

The commission has no responsibility for the distribution of the railroads' security sales among bankers, Mr. Dickinson pointed out. "The issue which is properly here for the commission to decide is what is in the best interest of the railroad industry and of the public at large as affected by the railroad industry." The fact that certain banking firms are not getting as much railroad business as they would like to have, so that they assert a monopoly exists in railroad financing, has, he said, resulted in this case being made "an arena for a fight between bankers as to who shall enjoy the business of bringing out railroad securities." If it should be shown that the bankers' "spread" in the sale of railroad securities is too great, he pointed out, the commission can correct that situation without imposing compulsory competitive bidding.

A railroad bond issue, he continued, "is not a standardized commodity produced under methods of mass production. It is devised to fit into a particular financial niche and to meet a particular market." In deciding under any given set of circumstances what kind of issues a railroad can legally or financially offer; what kind will be most advantageous to it both immediately and with regard to its future needs; what kind will be most attractive on the market; and what legal or financial steps, if any, ought to precede the offer—in making such decisions, said Mr. Dickinson, railroads have the assistance of experienced banking houses when they dispose of issues through negotiated sales. "This process would be completely disrupted and destroyed by the introduction of compulsory competitive bidding. The railroad would then have to work out the design and details of an issue and have it ready for delivery in advance of knowing who would be the purchaser. . . . The issue would spring full-fashioned from the brain of the railroad and come naked into the world without a financial sponsor to temper the critical scrutiny of prospective

(Continued on page 781)

Wage and Revenue Trends Discussed

Changes in recent earnings of carriers and employees get I.C.C. Bureau's study

Where five years ago the Class I railroads of the country received almost exactly as much revenue from passengers in parlor and sleeping cars as from those in coaches, they are now receiving much more revenue from coach business than from parlor and sleeping car business, the Interstate Commerce Commission's Bureau of Transport Economics and Statistics points out in the latest issue of its monthly Comment on Transportation Statistics.

Taking the figures for the first six months of the years involved, the report illustrates this development by comparing the \$88.3 million received from coach passengers in 1938 to the \$88.5 million received from the parlor and sleeping car passengers in the same period to the 1943 figures, which show receipts of \$441.8 million from coach travel and \$279.2 million from parlor and sleeping car travel. Expressed in terms of percentages, with the 1938 results as a base, the revenues from coach business have increased 500 per cent, where the revenues from parlor and sleeping car business have increased 315 per cent.

Although the basic fare level has undergone various changes since 1938, including the 10 per cent general increase allowed in 1942, these changes are not alone in affecting the results commented upon, the report explains. Other factors involved are the lengthening of the average journey, reduced fares for certain kinds of travel, and land-grant deductions, all of which affect the revenue per passenger mile.

The average journey (on the individual railway) in the first half of 1943 was 107 miles for coach passengers, other than commutation, and 419 miles for those in parlor and sleeping cars. The corresponding 1938 averages were 50 and 267 miles. At the same time, of course, the report further points out, there has been a decided increase in the seat occupancy of cars of all types.

The Bureau includes in the latest Monthly Comment comparative figures on the monthly earnings of employees of various classes for the month of August in each of the years from 1940 through 1943. On the basis of average straight time hourly earnings the increase for August, 1943, over the same 1940 month, for all employees, was 15.4 per cent, this tabulation reveals. On the basis of the average monthly compensation per employee (calculated on the mid-month count), the increase for August, 1943, over the corresponding month of 1940 was 31.0 per cent.

As broken down by classes of employees, the largest increase in earnings was shown on each basis by the maintenance of way and structures group, where hourly earnings increased in the four years involved by 20.4 per cent and average monthly compensation in the same period increased

(Continued on page 782)

Rate Reduction Is Extended to July 1

Commission rules Ex Parte 148 increases are not essential under present conditions

Proceeding as was expected after its issue on October 7 of a show-cause order in Ex Parte No. 148, the Interstate Commerce Commission has directed that the freight rate increases approved in that case early in 1942 and suspended from May 15 of this year to January 1, 1944, be further suspended until July 1, 1944. As reported in *Railway Age* of November 6, page 739, the railroads offered no opposition to this extension in their reply to the show-cause order.

The supplemental report of the full commission setting forth the conclusions upon which the extension was based was without dissenting opinions. It indicated, however, that Commissioner Miller concurs in the result without comment, while Commissioner Patterson expressed himself as follows:

"I concur in the result attained by the majority report, which is to continue the present rates and charges. I do not approve the method by which they arrive at that result.

"The present rates and charges became effective May 15, 1943, as maximum reasonable rates and charges. They may not hereafter lawfully be increased until evidence is adduced at public hearing showing they are unreasonably low. We have no such evidence."

The majority finding stated: "We have given further consideration to the evidence in this proceeding, including current statistical data in the way of the specified periodical reports of the petitioners which it was earlier stipulated we might consider, and also to the returns to the show-cause order. We find that, under present conditions, and, so far as we can reasonably foresee, for the period to and including June 30, 1944, the revenues received by the railroads from their present freight rates and charges will meet the objectives of the national transportation policy as defined in the Interstate Commerce Act, and the standards of section 15a(2) thereof.

"Upon the entire record as now supplemented, we are of the opinion and find that the added revenues that would result from the increases in freight rates and charges authorized in the original report and suspended in the report on further hearing, are not necessary or justified under conditions presently foreseeable for the period from January 1 to June 30, 1944, both inclusive; and that the present general level of freight rates and charges will be just and reasonable during that period."

After summarizing the substance of the various replies to the show-cause order, the supplemental report refers to the request of the associations of state regulatory commissions that the commission either cancel outright the authorization of the increases originally allowed in Ex Parte No. 148 or, if that cannot be done, that the commission undertake further proceedings to make

such action possible. "The question of the permanent suspension of the increases is beyond the issue raised by the order to show cause," the commission comments in this connection. "We will in the future, as in the past, endeavor to keep ourselves informed as to pertinent conditions, and from time to time will take whatever action may seem appropriate."

I. C. C. Service Orders

The Interstate Commerce Commission has issued Service Order No. 163, effective November 11 until December 15, unless sooner vacated, directing the Denver & Salt Lake to forward not over 10 cars of coal each week from Craig, Colo., to the Naval Ammunition Depot at Hastings, Neb., over the most available routes, pending reopening of its line, now blocked as the result of a tunnel cave-in.

The commission has set aside its Service Orders No. 138, 96, and 96-A, the former providing for rerouting traffic routed over the New York Central between St. Francisville, Ind., and Vincennes, and the others providing for rerouting certain shipments of machinery from Newport News, Va., to Odair, Wash.

The commission's frequently reinstated Service Order No. 120, under which railroads are forbidden to deliver bituminous coal to consignees whose supply on hand is sufficient for 10 days' operations, was suspended, effective November 6, by Service Order No. 120-G, following the conclusion of a wage agreement acceptable to the miners.

A. A. R. Appointment

The appointment of Henry E. Stringer as assistant to the chairman of the Car Service Division of the Association of American Railroads has been announced. Mr. Stringer, after many years in the service of the Hydraulic Press Brick Co., of which he was vice-president, will be concerned particularly with handling work involving the Shippers Advisory Boards, including the activities of the car efficiency committees throughout the country.

Wood-Preservers Plan One-Day Meeting

The American Wood-Preservers' Association will confine its 1944 annual meeting to one day at the Palmer House, Chicago, on Wednesday, April 26, according to plans that have just been approved by the Executive committee. It is expected that the program will be confined to the presentation of committee reports and papers at morning and afternoon sessions, with a luncheon at noon.

Put Off Ex Barge Rate Hearings

Hearings in the Interstate Commerce Commission's I. & S. Docket No. 4718 proceeding, involving proportional rates on grain moving ex barge through Chicago or Mississippi River gateways into Official Territory, which were scheduled for November 16, have been postponed to December 14, on which date they will begin before Examiner Fuller at the Hotel Morrison, Chicago.

Gurley Acclaims Carrier Economy

Dallas, where Wallace fictionalized on railway evils, gets some salutary facts

The railroads are now handling approximately 75 per cent of the nation's freight load (in ton-miles); and they are doing this share of the nation's transport job, not because of "monopoly power," but from the free choice of shippers, each one of whom is at liberty to select that form of transportation best suited to his needs.

This is the way that Fred G. Gurley, vice-president of the Atchison, Topeka & Santa Fe, characterized the railways' present service to the nation in an address at Dallas, Tex., on November 4—the city where Vice-President Henry Wallace recently anathematized the carriers for "monopoly" rate-making, and other fictional malpractices.

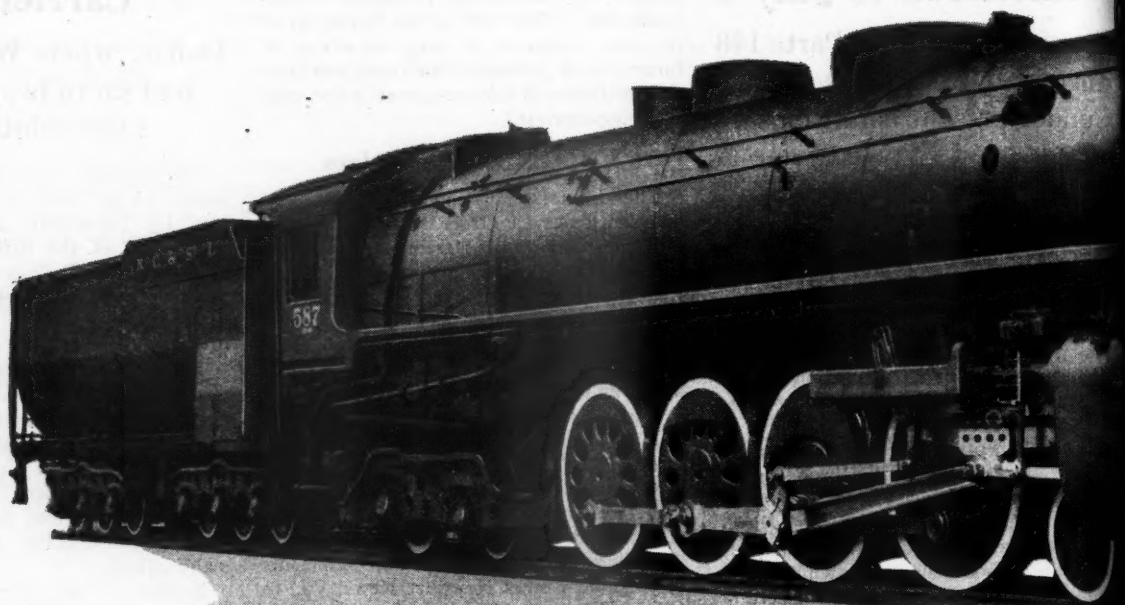
Neither are the railroads "choosy" about what they carry, Mr. Gurley went on to observe. "They will haul anything tendered to them"—for any destination served by rail anywhere on the continent. They will do the job in all weather and in all seasons—as real common carriers, serving all alike under conditions published and known.

The average charge for moving a ton of freight a mile, he continued to say, is less than it has been at any time in a quarter century—and, except for the period just prior to the war, the average charge for carrying a passenger a mile is lower than ever before in history. These low charges are maintained in spite of the fact that the larger items of railroad expense have risen—hourly wage rates, for instance, being about twice what they were during World War I.

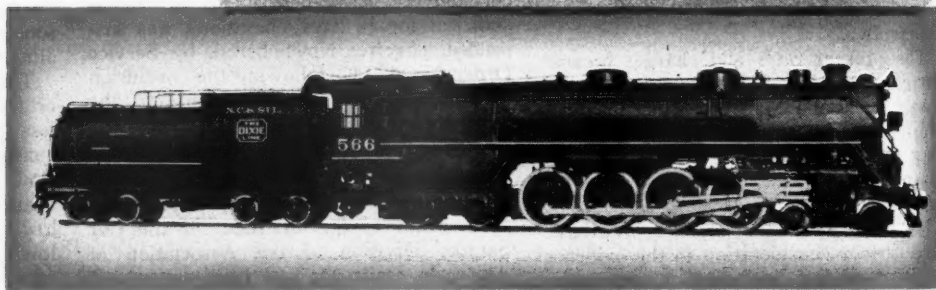
"In fact," he explained, "the only major item of cost of running a railroad which has not increased substantially is the amount paid to the investors whose money makes the whole operation possible. In the past 25 years the investment in the railroads has increased about \$8 billions. Their business has doubled. Nevertheless, in 1943, the return to the owners of the railroads—shareholders and bondholders combined—will only be about the same amount of money that they received 25 years ago."

Co-operative action among railways, shippers and receivers of freight to produce an over-all transportation service to fit every public need was cited by Mr. Gurley as a goal for post-war transportation. "Co-operation in the use of all forms of transportation," he said, "will not be accomplished by legislation cutting up the transportation industry into separate airtight compartments, savagely and destructively competitive with one another. Co-operation will develop the best service available at the best price, leaving the free choice of shipper and traveler to determine the service which he uses."

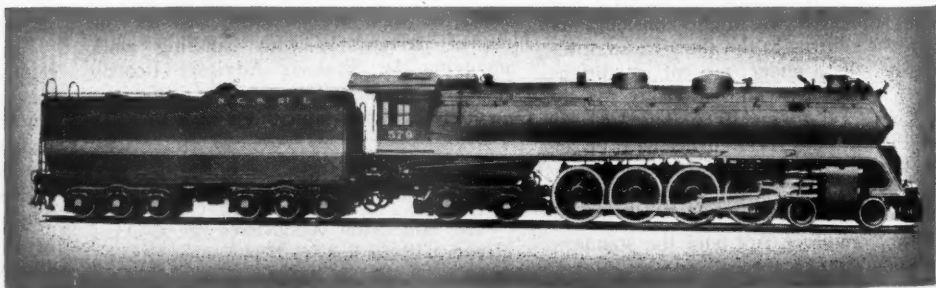
In speaking of the railroads' interest in the territories they serve, he said: "It seems to me that the railroads, hungry as



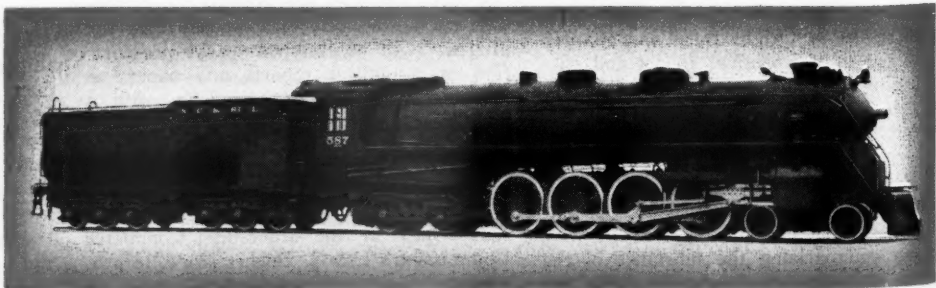
5
Delivered in March
1930

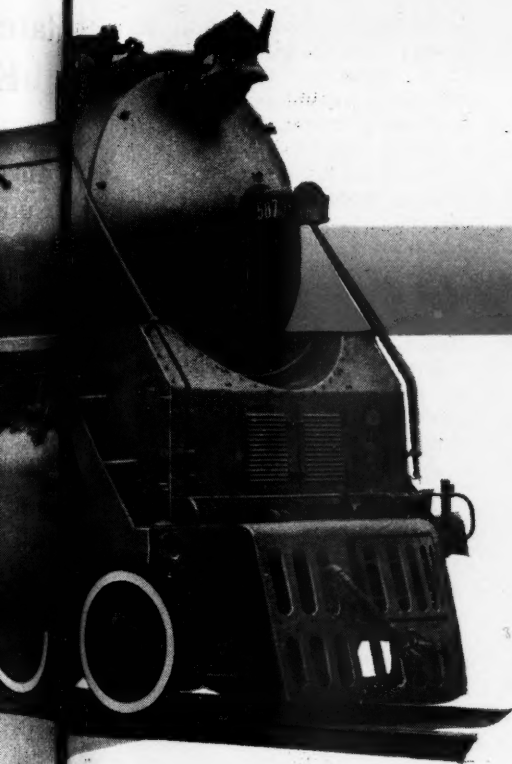


10
Delivered in July
1942



10
Delivered in September
1943





THE DIXIE LINE

The Nashville, Chattanooga and St. Louis Railway placed in service in 1930 five 4-8-4 type Alco locomotives. A steady increase in traffic created a vital need for more motive power. As a result ten improved 4-8-4 type locomotives were delivered to this road by Alco in July, 1942, and only recently, in September, 1943, Alco delivered ten more.

Right now the railroads are handling the heaviest traffic on record. Powerful steam locomotives of proven design are in large measure responsible for this outstanding performance.

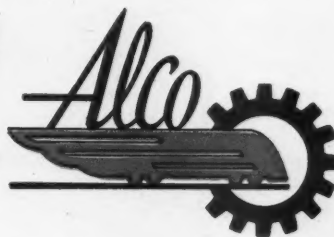
Locomotive Characteristics

Weight on Drivers	228,000 Lb.	Boiler Pressure	250 Lb.
Weight of Engine	399,000 Lb.	Tractive Power	57,000 Lb.
Cylinders	25 x 30 Ins.	Tender Capacity, Fuel	16 Tons
Diameter of Drivers	70 Ins.	Tender Capacity, Water	15,000 Gals.

AMERICAN LOCOMOTIVE

MANUFACTURERS OF MOBILE POWER

STEAM, DIESEL AND ELECTRIC LOCOMOTIVES, MARINE DIESELS, TANKS,
GUN CARRIAGES & OTHER ORDNANCE



they are for the traffic which comes from the agricultural and industrial development of their areas, are more than anxious to further that development. Their own intelligent self-interest demands that course of action. We are not going to stifle or hold back the production of our territory to aid any other section of the country. In fact, it is fair to say that on commodities produced both in our territory and in the North and East, the policy is that to the greatest extent possible, rates are maintained on a lower level outbound from our territory than inbound from other territories."

Concerning the procedure observed in the making of freight rates, he said that "as a practical matter, freight rates, which are the charges for railroad service, must be made by conference and joint action if chaos is not to reign. Every shipper knows that the bureau method of rate-making [which Mr. Wallace bitterly criticized] must continue if uniformity and stability of rates are to obtain; if the right of every shipper to be kept informed of rate proposals threatening competitive disadvantage is to be preserved; if small shippers are to have protection against the persuasive power of the great traffic volume of large shippers; and if indiscriminate rate-cutting with its attendant discriminations and with its destruction of revenue necessary to enable railroads to render efficient service is to be avoided.

"Not content with this orderly procedure, however, several members of Congress have introduced and are pressing

bills declaring for one or another degree of 'uniformity' in freight rates all over the country. These bills constitute direct legislative rate making, a task which Congress by reason of its form of organization and preoccupation with other matters cannot perform satisfactorily. Public recognition of this fact has resulted in the rate-making and rate-regulating functions being vested for more than 50 years in bodies such as the I. C. C. and various state commissions, whose personnel and staff have the necessary time and experience to perform those functions. A further evil of legislative rate-making is that it subjects this function to political pressure that is difficult to resist and likely to result in adjustments not fitted to the needs of commerce but responsive to the wishes of the group possessing the greater voting power."

The Pittsburgh Steel Company Opens Hollow Axle Plant

The Pittsburgh Steel Company opened its recently completed plant for the manufacture of hollow railway car axles at its Allenport, Pa., works to the inspection of a party of railway officers and press representatives on November 4. The plant, which is laid out in a continuous production line in which most of the movement and furnace temperatures are automatically controlled, is designed to turn out an average of 500 axles per day.

The Urshel-Pittsburgh hollow car axle was adopted as an alternate standard by

the Mechanical Division, A. A. R., in 1941 in sizes from 4 1/4 in. by 8 in. to 6 1/2 in. by 12 in., inclusive. The raw material for the axle is a seamless steel tube formed by the forging process on a Pilger mill from a pierced cylindrical billet. The tubes, cut to length, are taken to the axle plant where they are heated for upsetting and forging, one end at a time, in a continuous open-side heating furnace. The walls of the heated end are then increased in thickness in an upsetting press and the ends shaped to form the journals and wheelseats by a 3,000-lb. drop hammer. Each tube is then returned on gravity rollers to the charging end of the heating furnace through which it is again passed for heating and forming the other end. The formed axles pass to a continuous hardening furnace from which they move to combined straightening rolls and water quenching tank, in which the ends of the tubes are plugged automatically so that the quenching takes place on the outside only. The axle next goes through a continuous draw furnace from which it is again quenched. The ends are then simultaneously cut to length and centered.

Comparative fatigue tests were conducted at the Timken Roller Bearing Company's laboratory before the axle was adopted as an alternate standard. In these tests the tubular axle withstood 88,000,000 reversals of a unit stress of 10,000 lb. as compared with 875,000 to 2,755,000 stress reversals of the solid axles. Tests have also demonstrated the greater stiffness of the hollow axle under various loads and that it can be subjected to much higher loads before taking permanent set than can the solid axle. The 5-in. by 9-in. hollow axle weight 177 lb. less and the 6 1/2-in. by 12-in. axle 510 lb. less than the corresponding standard solid axles.

Balks at "Shortage Economy"

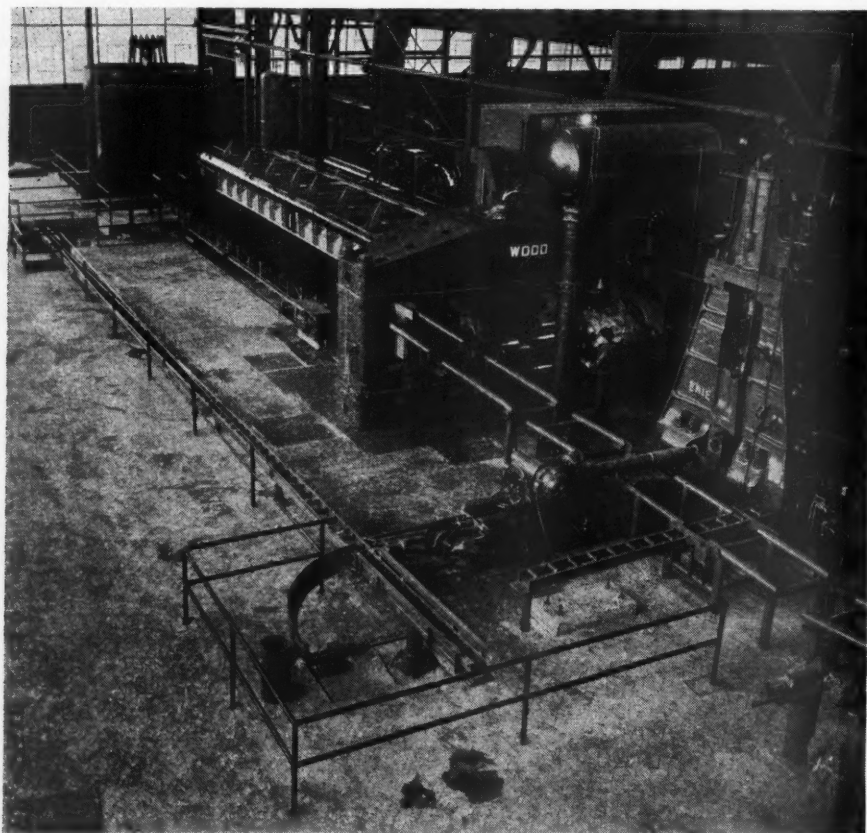
A breakdown of motor freight transportation is in the offing, unless immediate steps are taken to enable motor carriers to obtain more equipment, parts and tires, according to Ted V. Rodgers, president of American Trucking Associations.

"Inability to obtain equipment has cut the hauling capacity of trucks since July 1 and is producing continuing repercussions in every state of the union," he said. "A significant development is the fact that truck loadings in September showed a gain of only 5.6 per cent over the corresponding month last year. That showing represented the third consecutive narrowing of the tonnage gain in as many months and may foreshadow future operations on an even more restricted scale.

"Meanwhile, parts shortages are spreading and the trucking industry has been informed it faces a shortage of 1,500,000 heavy duty tires by January 1."

Asserting that the trucking industry is being hamstrung by scarcities of all kinds, Mr. Rodgers placed the blame on many government agencies which, he said, have given lip service to the importance of highway freight transportation, but which have been unwilling or unable to offer effective relief to motor carriers.

Shortages that are affecting the trucking industry's performance, in addition to those



A Partial View of the Hollow Axle Plant of the Pittsburgh Steel Company—To the Rear of the Upsetting Press Is the Continuous Tube End Heating Furnace—At the Right Foreground Is the Drop Hammer Which Forms the Journal and Wheel Seat

in equipment, parts and tires, include fuel and manpower, Mr. Rodgers said. While some government officials admit all these shortages exist, he continued, they flatly declare that motor carriers must become reconciled to doing without and pursue a "shortage economy program."

"Such an economy now is taking its toll in a drastic drop in truck loadings," said Mr. Rodgers. "Trucks are carrying an increased war load but they are doing so at the expense of civilian traffic, much of it essential to the war or to the nation's internal well-being. . . . Meanwhile, over-all loadings reports show that transportation via highway as a whole is developing a snarl which has grave implications for future efficient operations."

Freight Car Loadings

Loadings of revenue freight for the week ended November 6 totaled 754,724 cars, the Association of American Railroads announced on November 11. This was a decrease of 128,954 cars or 14.6 per cent below the preceding week, due to the coal strike and seasonal decline. Also, it was a decrease of 74,939 cars or 9.0 per cent below the corresponding week last year, and a decrease of 118,858 cars or 13.6 per cent below the comparable 1941 week.

Loading of revenue freight for the week ended October 30 totaled 883,678 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For the Week Ended Saturday, October 30	1943	1942	1941
District			
Eastern	166,561	163,673	187,693
Allegheny	187,912	187,452	192,271
Poconong	51,929	55,894	57,227
Southern	116,810	126,544	175,238
Northwestern	143,681	133,775	134,212
Central Western	138,932	144,948	137,338
Southwestern	77,853	78,274	60,766
Total Western Districts	360,466	356,997	332,316
Total All Roads	883,678	890,560	894,745
Commodities			
Grain and grain products	58,181	47,320	35,952
Live stock	26,978	24,832	19,821
Coal	146,145	169,690	162,311
Coke	15,375	14,436	17,740
Forest Products	43,912	47,514	44,472
Ore	77,311	63,257	59,378
Merchandise I.C.I.	106,544	92,216	158,921
Miscellaneous	409,232	431,285	401,250
October 30	883,678	890,560	894,745
October 23	905,319	803,262	913,605
October 15	912,328	901,251	922,884
October 9	906,276	909,250	903,777
October 2	910,643	907,286	917,896

Cumulative Total,
44 Weeks 36,022,941 36,751,433 35,820,756

In Canada.—Carloadings for the week ended October 30 totaled 77,835 (the highest figure reached in the past 14 years) compared with 73,101 for the previous week, and 71,882 for the corresponding period last year, according to the compilation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
October 30, 1943	77,835	39,238
October 23, 1943	73,101	37,901
October 16, 1943	66,046	38,342
October 31, 1942	71,882	35,338
Cumulative Totals for Canada:		
October 30, 1943	2,883,519	1,653,518
October 31, 1942	2,948,242	1,489,006
November 1, 1941	2,679,476	1,306,384

Strike Vote—Seek More Featherbed Rules

The taking of a strike vote, which was started last week, continued this week. Ballots of the members of the 15 non-operating unions are returnable not later than November 25 and those of the five transportation unions, not later than December 1.

The distribution of ballots also marks the opening of a movement of the five transportation unions to change working rules. The Brotherhood of Locomotive Engineers and the Brotherhood of Railroad Trainmen attached several of the proposed rules changes to their strike ballots, while the Brotherhood of Locomotive Firemen & Enginemen, the Order of Railway Conductors, and the Switchmen's Union of North America—believing that this procedure would be prejudicial to the wage case—set up a joint committee to develop a full program and ordered a referendum among members of all their general grievance committees on the question of authorizing the joint committee to proceed with a movement for rule changes.

Among the points tentatively agreed upon by all five organizations are the following: Two weeks annual vacations with pay; expenses at away-from-home terminals; revision of the train limit rule; changes in the basic passenger day (for conductors and trainmen); time and one-half pay for overtime in passenger service; establishment of a uniform automatic release on arrival at terminals; application of the 40-hr. week provision of the Wage-Hour Act to men in yard service, including hostlers and hostlers helpers; time and one-half pay for the second shift where yardmen work two shifts in a 24-hour period; and pay for initial and final terminal delay time in freight service.

The first three rules are attached to the strike ballots of the engineers and trainmen, while authority is sought to enable the offices of these unions to handle the remaining proposals.

Great Lakes Vessels Achieve a Record-Breaking October

As the Great Lakes navigation season approached what Joseph B. Eastman, director of the Office of Defense Transportation, has called its "critical period," more than 11,500,000 gross tons of iron ore and 23,000,000 bushels of grain were transported on the Lakes in vessels of U. S. registry during October, the ODT announced November 8. This movement set a new October record for iron ore and an all-time monthly record for grain.

The 23,877,460 bushels of grain carried in October brought the season's cumulative total to 111,625,712 bushels, or within 3,363,288 bushels of the record total moved in the entire 1942 season.

October's 11,612,542 gross tons of iron

ore exceeded by nearly 200,000 tons the corresponding month's tonnage in 1942 and brought to 76,784,357 gross tons the cumulative 1943 ore movement. Coal dumped up to October 25 totaled 39,645,172 net tons for the season, or within 2,000,000 tons of the corresponding date's cumulative total for last year.

The ODT pointed out, however, that 48,704,768 bushels of grain and 9,515,643 gross tons of ore must yet be moved to fulfill the season's quotas, as well as an estimated 850,000 net tons of coal in cars at Great Lakes ports ready to be moved when coal shipments are unfrozen.

Economic Problems Limit Air-Cargo Transportation

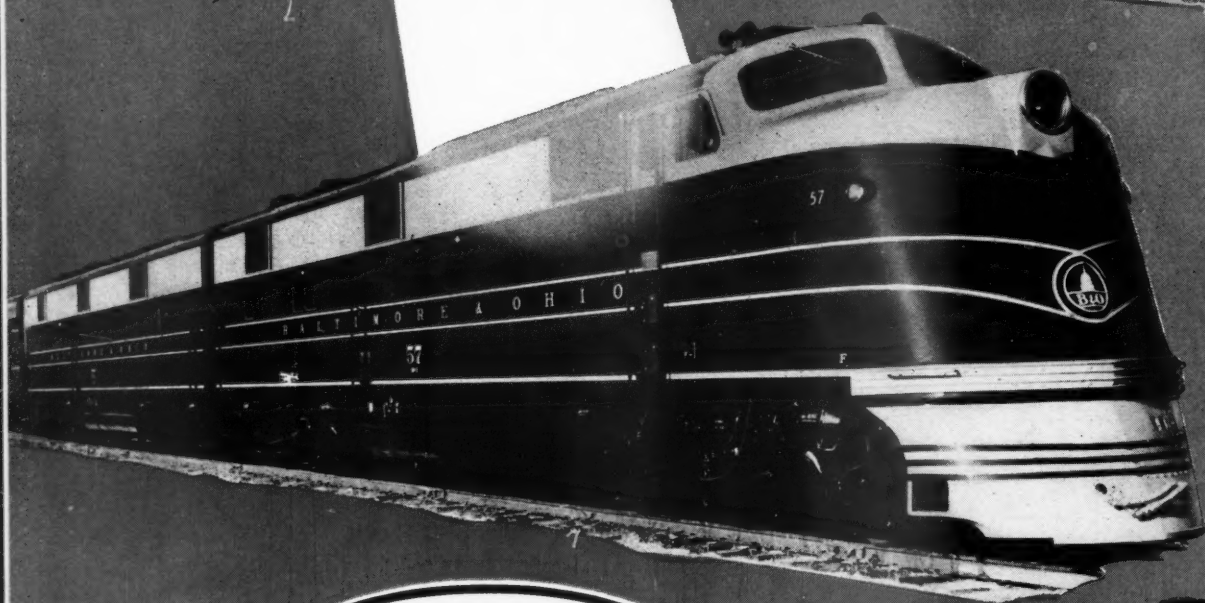
Over-zealous concepts of post-war air-cargo transportation were given a setback this week when, at a meeting of the Society of Automotive Engineers at Chicago on November 8 and 9, some of the problems of the transportation of freight by air were brought to light. The commercial use of converted military aircraft, according to E. C. Wells, chief engineer of the Boeing Aircraft Company, is possible but the entire fuselage of large military planes would have to be replaced to convert them into cargo carrying ships but before they could be used the present regulations of the Civil Aeronautics Board, which outlaw the carrying of heavy loads by air in the interest of safety, would have to be modified. Such ships would have a life of about two years and unless the government gave the ships to the airlines, their operation would be uneconomical because the original cost and the cost of conversion could not be written off in the two year period, it was disclosed. It was estimated that passengers could be handled in converted military planes at a rate of 2¼ to 2½ cents a mile but the charge for freight in large military planes would have to be about 35 cents a ton-mile.

Airports, handling equipment at airports and pick-up and delivery services were cited by Dr. John H. Frederick, professor of Transportation of the University of Texas, as the important facilities which have to be created before air and surface cargo transportation can be coordinated.

If an airport system were planned according to the distribution of population and business activity, he said, a total of 3,000 airports would be needed in order that there might be an airport within 30 minutes driving distance of every reasonably compact population group of as many as 5,000 persons and within one hour's driving time of all sections having a mean population density of as much as four persons per square mile. If a uniform geographical distribution were considered, more than 5,000 fields would have to be maintained to keep every point in the United States within 15 miles of an airport.

Fred Carpi, assistant general traffic manager of the Pennsylvania, in a paper on the Characteristics of Surface Cargo Transportation, compared the territorial coverage of air lines with surface carriers by showing that only 240 of the 3,646 towns with a population of 2,500 or more persons have the benefit of scheduled air line service while the service to towns under 2,500 is negligible. There are about 90,000,000

SPOTLIGHTING DIESEL SERVICE





LEADERSHIP..

LATE IN 1830, Peter Cooper's *Tom Thumb* became the first steam locomotive on the Baltimore and Ohio Railroad, leading the way to a new era in transportation. The horse was doomed . . . More than a century later (August, 1935), the B. & O. again took the lead by placing in service the first Diesel road locomotive on any American railroad. Today, it leads the East with 81 General Motors Diesel Locomotive Units totaling 102,600 horsepower in all classes of service — with more to come.

Available records of 63 Diesel units show well over 15 million miles operated with 94 percent average availability. What other type of motive power can match such outstanding performance?

★ KEEP AMERICA STRONG — BUY MORE WAR BONDS ★

ELECTRO-MOTIVE DIVISION
GENERAL MOTORS CORPORATION
LA GRANGE, ILLINOIS, U. S. A.



people at such a distance from present air terminals as to require line haul surface transportation to reach them, he said.

He estimated that only about \$1,202,000,000 of the \$7,897,000,000 revenues of the railroads, the truck companies, Railway Express Agency and forwarding companies in 1942 could be considered potential air traffic. This would include, he said, all of what is commonly called "less truckload" or "less than carload" traffic in addition, it includes low rated traffic paying as little as 1 1/4 cents per ton-mile, short haul traffic for hauls as low as 20 mi. and traffic to and from points far removed from actually operated air routes.

"The idea that a shipment can be picked up at shipper's doors and delivered to the consignee in one continuous operation without coming to rest exists largely in fiction," he continued. "Such a taxicab service could, of course, be rendered but at a cost which the public would not pay.

"The public, of course, is anxious to obtain the most expeditious service, provided that the charges are relative. Some traffic seeks the fastest route and a surcharge is cheerfully paid. Other traffic, including some very high grade merchandise, seeks the most economical route and in those cases service is secondary. It is fair to say, however, that on the bulk of the traffic a few hours on the short hauls and a day on the long hauls is not by any means as important as consistency or dependability. As illustrative, on a haul involving three or four hundred miles the most the public expects is next morning delivery. As a general proposition it would be of no particular advantage to make delivery late on the same day. The average business establishment desires to have its merchandise available for display early in the morning. Furthermore, most manufacturers do not have the freight available for transportation until late in the afternoon so that it would be physically impossible to have it available in the business hours of the same day. For some time to come, the service on the vast majority of the tonnage will be measured by the working day. There will always be available, of course, a certain volume of traffic, conveniently defined as emergency repair parts and luxuries on which the factor of time will completely overshadow cost. That traffic will seek the fastest service that man can provide."

Wallace Is Shown Error of His Ways

(Continued from page 775)

egrated systems.' The following is taken from his speech:

"The 'plot' has been sugar-coated to deceive the people. In the name of efficiency, economy, and under the slogan 'Preserving the Enterprise System,' it is proposed that Congress permit the creation of 'integrated transportation systems.'"

"Was this deliberate, or was the author plain careless? In either event, such an omission is inexcusable.

"The fallacious assumptions reached by the Vice-President could not have been

made unless the association's transportation policy had been inaccurately quoted.

"This association has opposed the principle of 'regulated monopoly' for transportation,—notwithstanding that it has worked well in the case of the telephone company and the public utilities. Only this year Congress authorized the consolidation of the Western Union and Postal Telegraph companies into a regulated monopoly.

"In addition to paying his respects to us, the Vice-President struck out at the Interstate Commerce Commission and the railroads, but he really hit the commercial traffic managers of agriculture and industry. They are equally,—in fact are perhaps more, responsible for the rate structure than are the railroad officers or the commission. The South and West are ably represented in this fraternity. Mr. Wallace has insulted the intelligence and integrity of the traffic profession. We hope its representatives ask for a showdown.

"All of the above is aside from Mr. Wallace's assault upon the railroad industry. His is a cruel 'reward' for the outstanding contribution which this industry has made to the war effort. Not a single word of praise for railroad labor or management.

"The people of this country will long remember 'Pearl Harbor.' But, they take the railroad performance for granted. The transportation industry, as a whole, was the only segment of the entire economy which was in a state of national defense on Sunday afternoon, December 7, 1941. Beginning that day, and over the period of the following week, the railroads alone transported over 650,000 men, with their

ordnance and supplies, to defense areas. There was no interference with usual domestic traffic.

"Mr. Wallace offers no solution whatever to the transportation problem. He contents himself with misrepresenting the proposals of those who are honestly striving to find some way out of a bad situation—one which, if not corrected, will eventually lead to government ownership.

"Those who oppose integration, as a principle, not only wave the bugaboo of 'monopoly' before the public but they warn that, as railroads would become a major part of integrated systems, they would stifle new forms of transport. This question should be explored from three standpoints:

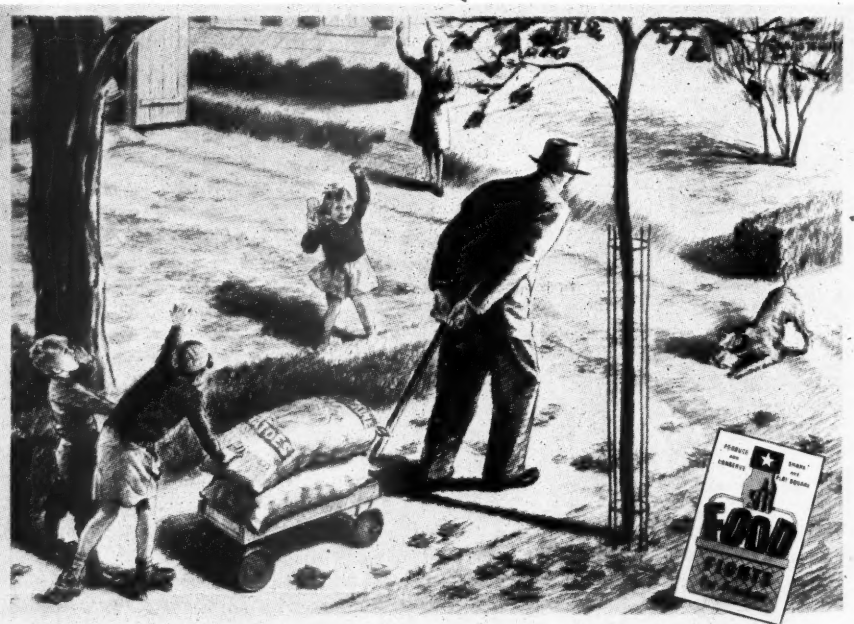
(1) What are the railroads? Who are their owners?

(2) What is the basic interest of shipper and consumer?

(3) What is the record of the revolutionary period of 1921 to 1930, when the newer forms of transportation entered the field as common carriers?"

Bangor & Aroostook Aids Maine Potato Industry

In co-operation with the Maine Development Commission—and, in behalf of its largest customer, the potato industry—the Bangor & Aroostook has appropriated nearly \$15,000 toward a merchandising and advertising campaign designed to help move the Maine potato crop to out-of-state storage before the set-in of cold weather. The scheduled advertisement, entitled "What? That Fellow Doakes Hoarding Potatoes?", (reproduced in part in the accompanying il-



"WHAT? That Fellow Doakes HOARDING POTATOES?"

Not On Your Life—Uncle Sam Has Asked Him to Help Store This Year's Bumper Crop

Last spring your Government urged the country's potato growers to increase their production of white potatoes. In spite of wartime handicaps, shortages of labor, of fertilizer and of farm equipment, the potato growers of the State of Maine have produced the largest and one of the finest potato crops that the State has ever grown. Similar production records have been achieved in other States.

Irish Potatoes are hereby designated as a Victory Food. Select them for your household and for your appeal in the press, urges, "It is necessary for the grower, the food trade, the consumer and the government to unite in a vigorous program of use and conservation of white potatoes during the harvest season to prevent waste of any part of this valuable crop. Your Government urges storage of

food trade of America, to do your part so that all the Doakes in your community can buy and store potatoes at the moderate retail prices that will be in force under U. S. P. A. ceilings during October and November.

The moving and marketing of the potato crop is one of the Government's food problems. It is your duty to help solve it by buying and storing potatoes.

A Portion of the B.A.R.'s Advertisement in Behalf of Its Customers

illustration) will appear in 24 important food trade publications, and in 12 daily newspapers, thereby reaching wholesalers and retailers of potatoes in every branch of the Eastern food industry, as well as representatives of Cleveland, Detroit and Chicago markets.

The message points out that the "moving and marketing of this year's bumper potato crop is one of the government's most crucial food problems." In addition, it asks wholesaler, retailer and "Mrs. Doakes of your community" each to buy and store potatoes to the limit of his ability.

"As 'America's Potato Railroad', the advertisement reads, "it is the problem of the Bangor & Aroostook also, to provide the facilities to move this bumper crop from 'Maine's Potato Empire' to all terminal markets from which it will be distributed throughout the Eastern half of the country."

Hears Arguments on Competitive Bidding

(Continued from page 776)

bidders all anxious to buy it as cheaply as possible."

The arguments of banking firms opposed to a rule requiring competitive bidding were voiced by Theodore Kiendl, counsel for Morgan Stanley & Co. of New York, Arthur H. Dean, speaking for the Investment Bankers Association of America, and others. They not only emphasized the point that, in their opinion, no benefit to the railroads would result from such a rule, but they suggested that it would result in a breakdown in the machinery for marketing securities, as large investment houses would be inclined to avoid dealing in such issues, while small ones, which now generally participate more or less under the wing of the firms that negotiate the sales, would be put out of business. The commission was informed that just this result has followed a requirement of compulsory competitive bidding in the public utility field.

The proponents of compulsory competitive bidding were represented, among others, by former Senator Robert J. Bulkley and Joseph L. Weiner, both counsel for Halsey Stuart & Co. and Otis & Co., and C. W. Sellers, speaking for the Chesapeake & Ohio. Their position was supported by Senator Truman, who appeared briefly before the commission to express his conviction that not only in selling railroad securities, but in all transactions involving the public interest, the rule of competitive bidding should be followed. "The railroads," he said, "are a semi-public institution. . . . They owe a duty to the taxpayers and to the people who use them as well as to their bankers and their stock owners. For that reason, I think it is in the public interest that competitive bids should be the policy of the commission where it is at all possible."

Mr. Sellers declared that the commission should "put the burden on the railroads" to prove, in any particular case, that competitive bidding should not be resorted to in selling a security issue. "Our quarrel," he said, "is not with the banker or the advice that he gives on occasion. It

Budd, Sillcox, and Wright Honored by A. S. M. E.

Three men well known in the railroad and railroad supply industries are among those upon whom honors are to be conferred at the annual meeting of the American Society of Mechanical Engineers to be held at the Pennsylvania Hotel, New York, November 29-December 3. The bestowal of honorary membership on Ralph Budd, president, Chicago, Burlington & Quincy, will be made with the citation:

"Forty years a railroader; a pioneer in the development of Diesel-powered lightweight trains; civil engineer and executive; builder of railroad structures and railroad organizations; president of the Burlington Lines."

Roy V. Wright, managing editor of the *Railway Age*, will receive honorary membership as an

"International authority in railroad engineering, off-honored as author, editor, publisher, teacher, statesman, an amiable competent crusader for social and civic responsibilities of the engineer."

Lewis K. Sillcox, senior vice-president, New York Air Brake Company, will receive the A. S. M. E. medal as an

"Eminent engineer, executive, distinguished lecturer, beloved gentleman and a lover of wisdom, for his preeminent and permanent contributions to the art and science of engineering, of transportation, of education, and the fine art of living. And for his ingratiating, inspiring influence upon the lives of men."

This medal is presented by the society "for distinguished service in engineering and science." It may also be awarded for general service in science having possible application in engineering.

Honorary membership, to which persons of acknowledged professional eminence are elected by unanimous vote of Council, is also being bestowed upon Edward N. Trump, senior member in the firm of E. N. & C. C. Trump, Syracuse,

N. Y., and Francis Blossom, partner in the firm of Sanderson & Porter, N. Y.

The Worcester Reed Warner Medal, a gold medal bestowed on "the author of the most worthy paper received dealing with progressive ideas in mechanical engineering or efficiency in management," will go to Igor Ivan Sikorsky, Vought-Sikorsky Aircraft Division, United Aircraft Corporation, Stratford, Conn.

The Holley Medal, bestowed for "some great and unique act of genius of engineering nature that has accomplished a great and timely public benefit," will be received by Vannevar Bush, president, Carnegie Institute of Washington, Washington, D. C.

The Charles T. Main Award, an annual cash award of \$150 for "the best paper within the general subject of the influence of the profession upon public life," the exact topic being assigned by the Board of Honors and Awards, goes to Mitchell C. Kazen of the University of Detroit; tool designer, Cook Engineering Company, Detroit, Mich.

Troels Warming, mechanical engineer, Nordberg Manufacturing Company, Milwaukee, Wis., will receive the Junior Award, an annual cash award of \$50 presented for "the best paper or thesis submitted by a Junior Member."

William L. Hutton of Princeton University; Ensign, U. S. N. R., will be presented with one of two Student Awards of \$25 each established for "the best papers or theses submitted by Student Members" in undergraduate and post graduate work. Mr. Hutton is an undergraduate.

is with the manner and the relationship in which that advice is given and the securities are purchased by him. If that relationship is unsound, then certainly the advice which is given in that relationship will likewise be unsound. That it is inherently unsound, unhealthy and tends to lead to a parasitic condition is, we believe, obvious." This view, he went on to say, "springs from intelligent selfishness."

Julius G. Luhrs, representing the Railway Labor Executives Association, went on record in support of a compulsory competitive bidding rule. "We believe," he said, "that the system of private negotiations not only results in bad prices but also in bad advice." This view is based, he explained, on "the fact that competitive bidding is opposed by institutional investors whose interests obviously lie in lower prices for railroad bonds, and by the bankers who adhere to the dangerous notion that a railroad may be damaged by getting too high prices for its securities."

Mr. Bulkley addressed his argument particularly to the contention that "two houses have enjoyed a virtual monopoly in railroad financing." There is "not the slightest bit of competition" between these two firms, he asserted, as each participates in the other's underwriting in predetermined proportions. "We don't think the commis-

sion will want to say that they endorse that which produces monopoly," he added. "The monopoly not only exists, but they propose to continue it and tell you why they propose to continue it."

In closing, Mr. Bulkley asked that the commission adopt four suggestions: First, that it reaffirm the doctrine that the issuer should get the best obtainable price for his securities; second, that the issuer should be warned against the "insidious doctrine" that his credit may be damaged by selling securities at too high a price; third, that the commission should adopt a rule to make it impossible for a railroad to deal exclusively with a single financial house; and fourth, that it adopt a general competitive bidding rule.

Truck-Forwarder Rate Extension Passes Congress

The Senate on November 9 passed without discussion H. R. 3366, thus completing congressional action to extend for an additional 18 months the period during which freight forwarders may continue joint-rate arrangements with motor truck operators without introducing assembling and distribution rates published by the carriers.

As reported in *Railway Age* of November 6, page 738, Senator Wheeler, Democrat of Montana, had introduced a bill to the same effect, S. 1425, and after hearings by

a subcommittee of the Senate committee on interstate commerce, of which he is chairman, that bill was favorably reported to the Senate, along with a dissenting report by Senator Reed, Republican of Kansas, in which the assertion was made that the finding of the majority "permits the law already enacted to continue to be flouted by those for whose regulation and control it was enacted."

The purposes of the bill were approved by the Interstate Commerce Commission, the Office of Defense Transportation, and the War Department, and Senator Reed did not pursue his opposition to its provisions on the Senate floor. Inasmuch as the House bill to the same effect had previously been passed by that body, it was substituted for Senator Wheeler's bill.

In addition to extending the date by which present rate practices must be terminated, the bill provides for the establishment of additional joint rates by forwarders. According to Senator Reed, "Any freight forwarding company having a permit to operate in any territory in the United States, no matter how severely limited, will then be authorized, without regard to the Interstate Commerce Commission, to extend its operations anywhere and everywhere."

Issues 1943 Edition of Uniform System of Accounts

The Interstate Commerce Commission has issued the 1943 edition of its Uniform System of Accounts for Steam Railroads, making the new version of this document available November 8.

U. P. Employees Win Victory Garden Award

The highest award of the National Victory Garden Institute, in the form of a plaque, has been awarded to the employees of the Union Pacific in recognition of their contribution to the victory garden program in 1943. During the year, 27,000 employees grew gardens on either company or private

grounds. Nearly 2000 gardens were planted on company property.

Judges who selected the railroad to receive the award were: Richardson Wright, editor of House and Garden; J. W. Johnston, horticultural editor of the New York Herald Tribune; and Carl F. Wedell, secretary of Greater New York Victory Garden Council and head of the School of Horticulture of State Institute of Agriculture at Farmingdale, Long Island.

September Accident Statistics

The Interstate Commerce Commission on November 5 made public its Bureau of Transport Economics and Statistics' preliminary summary of steam railway accidents for September and the first nine months of 1943. The compilation, which is subject to revision, follows:

Item	Month of Sept.		9 months ended with Sept.	
	1943	1942	1943	1942
Number of train accidents*	1,233	1,066	12,115	9,472
Number of casualties in train, train-service and non-train accidents:				
Trespassers:				
Killed	140	203	1,391	1,595
Injured	106	133	1,072	1,242
Passengers on trains:				
(a) In train accidents*				
Killed	76	12	131	32
Injured	247	90	1,705	834
(b) In train-service accidents				
Killed	7	9	40	35
Injured	202	189	2,029	1,554
Travelers not on trains:				
Killed	1	3	12	15
Injured	82	92	828	615
Employees on duty:				
Killed	75	67	732	671
Injured	3,798	3,151	33,795	24,526
All other nontrespassers:**				
Killed	131	185	1,371	1,591
Injured	618	546	4,853	4,848
Total—All classes of persons:				
Killed	430	479	3,677	3,939
Injured	5,053	4,201	44,282	33,619

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than \$150 to railway property.

** Casualties to "Other nontrespassers," happen chiefly at highway grade crossings. Total highway grade-crossing casualties for all classes of persons, including both trespassers and nontrespassers, were as follows:

Persons:				
Killed	125	156	1,176	1,424
Injured	375	335	2,801	3,273

Wage and Revenue Trends Discussed

(Continued from page 776)

47.6 per cent. Train and engine employees earned 10.5 per cent more in August, 1943, than in the comparable 1940 month on the basis of average straight time hourly earnings, and 23.4 per cent more on the basis of average monthly compensation, these increases being the smallest, on a percentage basis, reported for any group.

Average monthly compensation per employee in August of this year, as stated by the Bureau, was \$180 in the clerical and general group, \$155 in the maintenance of way and structures group, \$202 in the maintenance of equipment and stores group, \$180 in the group of transportation employees other than train and engine, \$236 in the switch tenders and hostlers group,

and \$274 in the train and engine group.

The Bureau goes on to say that the average hourly earnings in each occupational group was approximately the same in August, 1941, as in August, 1940. The increases in such earnings as reflected in the averages for the same month of 1942 and 1943, were, it states, "primarily the result of wage adjustments agreed to in the December, 1941, mediation settlement." It explains, also, that the average monthly compensation per employee, based on the mid-month count, was considerably higher for the various groups in 1943 (and in 1942), not only as a result of the 1941 wage settlement, but also because of an increase of about 10 per cent in the average number of hours paid for per employee for combined straight time and overtime.

The spread between the freight and passenger revenues reported each month this year and those for the same month last year is steadily declining, the Bureau notes. The increase in freight revenue, 1943 over 1942, was 21.8 per cent for April, 17.6 per cent for May, 9.5 per cent for June, 9.3 per cent for July, 9.0 per cent for August, and 5.4 per cent for September. The increase in passenger revenue, 1943 over 1942, was 93.5 per cent for April, 79.7 per cent for May, 79.0 per cent for June, 70.4 per cent for July, 56.5 per cent for August, and 39.8 per cent for September.

While the operating ratio for September of this year was 61.6 as against 57.3 last year, this change is in large part accounted for, according to the Bureau, by the inclusion of \$19,481,159 as anticipated wage increases charged this year. For the nine months, January to September, 1943, the accrual in anticipation of major wage awards was \$64,749,980.

The Bureau discusses at some length certain accounting charges included in maintenance operating expenses which do not represent present cash expenditure. In the nine months of this year ending with September, it points out, \$236,993,879 was charged for depreciation of property. "Such money would logically be spent to buy new property of this nature," it comments, "but it is not ear-marked."

As "amortization of defense projects" the total charged during the nine months was \$100,736,406, covering both road property and equipment. "In making such charges," says the Bureau, "the carriers are permitted to assume that such property will be retired at the end of 5 years. It is easy to see that this will happen with facilities constructed to serve an army camp. It is less easy to comprehend with reference to amortized locomotives and cars of ordinary type which actually may continue to run for 20 or 30 years."

The account "Major Repairs—Equipment," provided to cover situations where repairs to locomotives, for example, are postponed to a future year from the time they normally are due, on account of the volume of traffic to be moved, has been used by only one large railroad during the first nine months of this year, the Bureau pointed out.

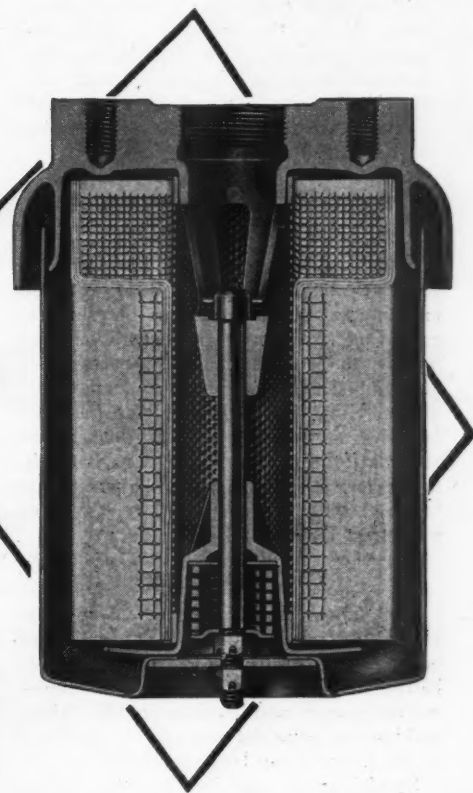
As has been emphasized elsewhere frequently, the deferred maintenance accounts which the commission has authorized the railroads to set up to cover situations where



27,000 U. P. Employees Contributed This Year to the Victory Garden Program

Air Brake

Life and Vitality are Sustained when Compressors *Breathe Clean Air*



NOW, when all railroad equipment is being subjected to intensive service in the effort to meet urgent transportation requirements, Air Brakes are being given their share of hard usage. Inherently sturdy and reliable, they need be given only reasonable care to preserve their functional integrity. ★ One important consideration is a means to assure that the compressor will breathe clean air—such as is provided by the modern inlet Filter. This is very effective in precipitating heavy dirt particles and intercepting fine

dust. Moving parts are thus kept working freely, air passages open, valves tight. Many railroads have thereby eliminated faulty or erratic compressor operation, and materially extended service life. ★ This Filter can be readily applied to compressors now in service. For such it will prove to be a low cost means to assure satisfactory performance over long operating periods. The higher degree of brake reliability thus maintained will materially aid in expediting the movement of vital traffic

» » » » » »

WESTINGHOUSE AIR BRAKE CO.

WILMERDING, PENNSYLVANIA

maintenance work that should be done has to be postponed "due to priorities for materials and supplies or shortages of labor" have not been extensively used. Nevertheless the Bureau calls attention to the fact that the amount of work performed in 1943 and credited to the 1942 accrual has been almost as great as the amount charged to this deferred account in 1943, with the result that net amount so charged is very small.

While operating expenses are charged with the value of road property retired where it is not subject to depreciation accounting, as contrasted to the former practice of charging this item against profit and loss, these figures are not as yet shown separately in the monthly reports, the Bureau comments. "Their deduction from operating revenues," it says, "would logically be applied to the reduction of debt or stock, or used for new construction, but such money is not ear-marked."

Freight Tax Change Becomes Law December 1

Following the signature by President Roosevelt on November 4 of H. R. 3338, effecting an amendment to the Internal Revenue Code to remove the exemption from the tax on transportation of property which has applied to non-government traffic moving on government-operated transportation facilities, particularly the barge lines, and also clarifying certain exemptions from the tax when government-owned shipments are involved, these provisions became law, to go into effect December 1.

Club Meetings

The "honor night" meeting of the Car Department Association of St. Louis will occur November 16, 8 p. m., Hotel De Soto ballroom, with C. M. House, superintendent, motive power and equipment, the Alton, making the principal address, "A Railroad Is No Better Than Its Supervision".

Special guests will include other former honor speakers: LeRoy Kramer, executive vice-president, General American Transportation Corp.; K. F. Nystrom, mechanical assistant to chief operating officer, Chicago, Milwaukee, St. Paul & Pacific; S. O. Taylor, former master car builder, Missouri Pacific; V. R. Hawthorne, director, Mechanical division, Association of American Railroads; C. J. Nelson, superintendent of interchange, Chicago; M. E. Fitzgerald, master car builder, Chicago & Eastern Illinois.

"Draft Gears and Their Relation to Freight Car Operation and Maintenance" is the topic to be delivered by J. M. Hall, vice-president, Cardwell Westinghouse Company, at the next meeting of the Eastern Car Foreman's Association, November 12, 8 p. m., 29 West 39th street, New York.

October Export Traffic

There were 126,013 cars of export freight, excluding coal and grain, handled through United States ports in October, compared with 82,539 cars in October last year, or an increase of 53 per cent, according to the Association of American Railroads. Export grain unloaded at the ports

in October totaled 2,285 cars, compared with 2,540 in October, 1942, or a decrease of 10 per cent.

In addition, the railroads handled 578 carloads of coastal freight in October this year, compared with 882 in the same month last year, or a decrease of 34 per cent.

Supply Trade

The Bullard Company, Bridgeport, Conn., was awarded the Army-Navy "E" for the third time on November 2.

The storage battery division of the Philco Corporation, Trenton, N. J., has been awarded a second star to add to its Army-Navy "E" flag, for continued meritorious service on the production front.

Ceremonies celebrating the presentation of the Army-Navy "E" production award to the employees and management of the Davenport Besler Corporation were held at the company's plant at Davenport, Ia., on November 3.

J. M. Darbaker, general superintendent of the Carnegie-Illinois Steel Corporation, Chicago, has been promoted to assistant manager of Chicago district operations to succeed R. G. Glass, who was elected vice-president and general manager of the Geneva Steel Company, Provo, Utah.

Chester F. Conner, formerly merchandise manager, has been appointed assistant general manager and Fred Lang, formerly manager of sole and heel sales, has been appointed merchandise manager, of the industrial products sales division of the B. F. Goodrich Company.

Alfred C. Ryan, former member of the executive staff of the Universal Credit Company who has been serving with the War Production Board since November, 1942, has been appointed director of sales of the Houde engineering division of the Houdaille-Hershey Corporation.

E. G. Plowman, traffic manager of the Colorado Fuel & Iron Co., since 1937, has been appointed to the newly created position of vice-president in charge of traffic for the United States Steel Corporation. Mr. Plowman will assume his new duties on January 1, 1944.

Dr. Nathaniel Baum has been appointed head of a new organic research department which Turco Products, Inc., has opened in its Los Angeles, Calif., laboratory, to keep pace with new problems in the railroad and allied industries. Doctor Baum had been a consulting chemist in organic synthesis and resins in Chicago for the last six years.

In less than a week, the Pullman-Standard Car Manufacturing Company, Chicago, has converted one of its plants at Hammond, Ill., from the production of M-4 tanks to the making of carriages, limbers and bogies for 155 mm. guns to fill contracts placed by the Chicago Ordnance District. The tank shops were cleared of practically all machinery, new equipment was installed and work on the contracts was

started in less than a week from the time the last tanks were shipped. In addition, the company was given orders and has started production of transport wagons for 8-in. guns and 240-mm. howitzers and will modernize a number of transport wagons.

John C. Graf has been appointed sales manager of the hydraulic press and special equipment department of the Southwark division of the Baldwin Locomotive Works. Following his graduation from Temple University, Mr. Graf was associated for two years with the Link Belt Company and later with the Camden Iron Works of R. D. Wood & Company. He joined the Southwark Foundry & Machine Co., now the Baldwin Southwark division, in 1915, serving as draftsman, expeditor, inspector, purchasing agent and salesman and was made New England sales manager in 1925, which position he held at the time of his new appointment.

TRADE PUBLICATIONS

ELECTRIC INDUSTRIAL TRUCKS.—Detailed descriptions of all models, as well as a great many illustrations showing uses of industrial power trucks, are contained in the 76-page War Model catalog issued by The Yale & Towne Manufacturing Company, Philadelphia division, Philadelphia, Pa. A separate section of the catalog is devoted to the workings of WPB Limitation Order No. L 112 as applied to Yale industrial trucks.

PRESSURE TREATED WOOD.—Economical and Permanent Construction with Pressure-Treated Wood is the title of a 28-page book published by the Koppers Company, Wood Preserving Division, Pittsburgh, Pa. The book discusses various pressure treatments of wood, including creosote treatment, salt treatment for making wood fire-resistant and a treatment for acid-proofing wood. The book also discusses the mechanical advantages of pressure-treated wood and presents a section of photographs showing applications of pressure-treated wood in many fields, including railroad tracks and structures.

PART-TIME RAILROADERS.—"In order to obtain the more rapid release of cars the railways are now endeavoring to recruit more paid voluntary part-time workers. War workers, clerks, teachers, butchers, motorists, and housewives are among the helpers who have already formed enthusiastic groups to assist in loading and unloading freight, cleaning engines, etc., in their spare time. On a recent Sunday 800 volunteers cleaned 300 engines at 33 different engine terminals on one railway, and 800 spare time workers (including 260 women) are helping to load and unload cars on another line; 30 part-time workers are employed in the mornings and evenings to clean the cars of London tube trains. The hours of duty of these voluntary workers are arranged so as not to interfere with ordinary full-time employment, and railway part-time workers who work regularly for three or four hours are paid for their work."—Times (London) Trade & Engineering Supplement.

HSGI

Wear Resisting

PARTS



FOR SUPER SERVICE

THE wear-resisting properties of HUNT-SPILLER *Air Furnace* GUN IRON are helping many railroads to obtain greater mileage from those locomotive parts subjected to constant frictional wear and high superheat temperatures.

Performance reports show big savings in maintenance costs. These reports include many statements from Mechanical department officers stressing the long service life of HSGI wear-resisting parts.

Today more than ever before, your road needs the super-service built into HUNT-SPILLER *Air Furnace* GUN IRON —especially for the power that is helping America to "Keep 'em rolling" to Victory.

HSGI
Reg. U. S. Trade Mark

Cylinder Bushings
 Cylinder Packing Rings
 Pistons or Piston Bull Rings
 Valve Bushings
 Valve Packing Rings
 Valve Bull Rings
 Crosshead Shoes
 Hub Liners
 Shoes and Wedges
 Floating Rod Bushings

Finished Parts
 Dunbar Sectional Type Packing
 Duplex Sectional Type Packing
 for Cylinders and Valves
 (Duplex Springs for Above
 Sectional Packing)
 Cylinder Snap Rings
 Valve Rings, All Shapes
 Light Weight Valves
 Cylinder Liners and Pistons
 for Diesel Service

HUNT SPILLER MFG. CORPORATION
V. W. Ellet, President **E. J. Fuller, Vice-Pres. & Gen. Mgr.**

Office & Works
 383 Dorchester Ave. South Boston 27, Mass.
 Canadian Representative: Joseph Robb & Co., Ltd., 5575 Cote St. Paul Rd., Montreal, P. Q.
 Export Agent for Latin America:
 International Rwy. Supply Co., 30 Church Street, New York, N. Y.

HUNT-SPILLER

GUN IRON

Air Furnace

Financial

ALTON.—Reorganization.—The Federal District Court at Chicago, on November 9, granted the Alton an extension of time until February 29, 1944, for the filing of its plan of reorganization. The petition asserted that a board of experts employed to gather data will be unable to finish its work by November 24, the date originally set.

ATLANTIC COAST LINE.—Tenders Asked.—The Atlantic Coast Line has invited tenders until November 16 for the sale to the railroad of its first consolidated 4 per cent bonds due July 1, 1952; Louisville & Nashville collateral trust 4 per cent bonds due October 1, 1952; and general unified 4½ and 4 per cent bonds due June 1, 1964. The railroad has approximately \$6,500,000 available for this purpose, and any bonds purchased will be retired.

ATLANTIC & NORTH CAROLINA.—Note.—This road, which is controlled through stock ownership by the State of North Carolina, has been authorized by Division 4 of the Interstate Commerce Commission to issue an unsecured promissory note for \$200,000, payable in five equal annual installments and bearing interest at 2 per cent. The note is to be delivered at par to the state, and the proceeds, together with \$400,000 advanced by the Navy Department to the Atlantic & East Carolina, lessee and operator of the road, will be applied to improvements required to serve a Marine Corps base at Cherry Point, N. C.

CHICAGO & NORTH WESTERN.—Substitution of Equipment.—Division 4 of the Interstate Commerce Commission has authorized this road to substitute under its second equipment trust of 1942, in place of certain equipment approved by the commission for which priorities could not be obtained, 500 composite-type 50-ton box cars to cost \$3,425 each.

CHICAGO, ROCK ISLAND & PACIFIC.—Sale of Collateral.—On motion of the Mississippi Valley Trust Company, the federal district court at Chicago on November 8, vacated an injunction order entered on November 2, 1933, restraining the trust company from disposing of collateral held by it as security for promissory notes of the Rock Island. According to the petition, the original indebtedness of the railroad was \$125,000. On October 21, 1943, the market value of the collateral was \$140,400 and the trust company's total claim, with interest amounting to \$61,474, was \$169,017 on October 25.

On another motion, the court authorized the trustees of the railroad to acquire not more than \$100,000 worth of capital stock of the Peoria & Bureau Valley.

GREAT NORTHERN.—Merger of Subsidiary.—This road's application for authority to acquire by merger and to operate the properties of the Brandon, Devils Lake & Southern, which it controls through stock ownership, has been approved by Division 4 of the Interstate Commerce Commission. At the same time authority was granted the G.N. to purchase all outstanding stock

of the Farmers' Grain & Shipping Co., of which the Brandon company holds 60.67 per cent, and to acquire the properties of this company. Upon completion of these transactions, dissolution of the two subsidiary companies is contemplated.

HOBOKEN MANUFACTURERS.—Trustee.—Division 4 of the Interstate Commerce Commission has ratified the appointment by the federal district court of Forrest S. Smith as trustee of this road in its reorganization proceedings.

KANSAS CITY SOUTHERN.—Promissory Notes.—This company has applied to the Interstate Commerce Commission for authority to issue 4 promissory notes in the total amount of \$278,400 as evidence of, but not in payment for, indebtedness under a conditional sale agreement for the purchase of 4 1,000 h.p. diesel-electric switching locomotives from the American Locomotive Company at a total cost of \$352,240, on which the road is prepared to pay 20.96 per cent in cash upon delivery and acceptance of the equipment.

MISSOURI PACIFIC.—Union Railway Note.—Application has been filed with the Interstate Commerce Commission for the Union (Memphis, Tenn.), the stock of which is owned by this road, to issue and deliver to it a 4 per cent promissory note for \$987,406, due in six months, as evidence of indebtedness for advances made to the subsidiary by the parent company prior to March 31, 1933.

NEW YORK, CHICAGO & ST. LOUIS.—Equipment Trust Issue.—On November 9, the Nickel Plate awarded an issue of \$2,025,000 of 1943 serial equipment trust certificates to Halsey, Stuart & Co., subject to Interstate Commerce Commission approval, on a high bid of 99.39 for 2½ per cent obligations, an interest cost basis to the railroad of approximately 2.21 per cent. The certificates, which will mature in fifteen equal annual installments, were re-offered at prices to yield from 0.90 to 2.40 per cent according to their maturity. The issue will finance approximately 80 per cent of the cost of fifteen new freight locomotives being built for the road by the Lima Locomotive Works. Contingent upon I. C. C. approval of the issue, the Nickel Plate will call for redemption all of its Lake Erie & Western extended 3 per cent bonds, due January 1, 1947, outstanding in the principal amount of \$4,933,000. Redemption of the latter bonds will necessitate the procurement of a bank loan of about \$2,000,000 with which to supplement existing treasury funds and the road already has assurances of favorable terms for such a loan.

NORFOLK & WESTERN-CHESAPEAKE & OHIO.—Proposed Construction of New Line.—The Chesapeake & Ohio and its subsidiary, the Levisa River, have been allowed by Division 4 of the Interstate Commerce Commission to intervene in the proceeding before the commission in which authority is sought by the Norfolk & Western to construct a 9.3-mile extension in Kentucky.

SEABOARD AIR LINE.—Reorganization Hearing.—On November 5, the United

States district court at Baltimore, Md., appointed a three-man arbitration committee to consider conflicts in the railroad's reorganization proceedings. The committee consists of representatives of the underlying bondholders, the general mortgage bondholders, and the first and consolidated bondholders.

WACO, BEAUMONT, TRINITY & SABINE.—Receiver's Notes.—Division 4 of the Interstate Commerce Commission has authorized the receiver of this road to issue and renew, but not beyond August 1, 1944, receiver's notes in the total face value of \$12,733, bearing 6 per cent interest.

Average Prices Stocks and Bonds

	Nov. 9	Last week	Last year
Average price of 20 representative railway stocks..	34.29	37.03	29.56
Average price of 20 representative railway bonds..	78.10	79.35	68.32

Dividends Declared

Cleveland & Pittsburgh.—Regular stock, 87½¢, quarterly, payable December 1 to holders of record November 10. Special guaranteed, 50¢, quarterly, payable December 1 to holders of record November 10.

Great Northern.—Preferred, \$1.00, payable December 13 to holders of record November 12.

Norfolk Southern.—(Initial), \$2.00, payable December 10 to holders of record November 26.

Pittsburgh, Bessemer & Lake Erie.—6% preferred, \$1.50, semi-annually, payable December 1 to holders of record November 15.

Equipment and Supplies

LOCOMOTIVES

Union Pacific Orders 35 New Steam Locomotives

The UNION PACIFIC is reported to have placed an order for 35 new steam locomotives with the American Locomotive Company, including five of 4-8-8-4 wheel arrangement, ten of 4-8-4 wheel arrangement and 20 of 4-6-6-4 wheel arrangement.

The BALDWIN LOCOMOTIVE WORKS reports that locomotives on order for 1944 delivery for the United States Army, the Lend-Lease Administration and domestic railroads represent a greater locomotive business than ever before on the books of the company at one time. The 1944 locomotive program will take the company out of tank production entirely, and the job of reconvertng is now under way.

FREIGHT CARS

The ALTON has been authorized by the Federal District Court at Chicago to purchase 100 50-ton composite hopper cars.

PASSENGER CARS

The NEW YORK CENTRAL is removing 20 coaches from express and milk trains, in which they were employed as train crew cars, and replacing them with other cars especially designed for that service by its equipment engineering department. After being overhauled, furnished and repainted, the coaches will provide accommodation for approximately 1,000 passengers.

Construction

PENNSYLVANIA.—The Pennsylvania Public Utility Commission has approved the abolition of a crossing above grade where the Pennsylvania's tracks and right of way cross state highway route No. 62122 near Burgettstown, and the construction of a temporary crossing at grade where the railroad's relocated tracks will cross a temporary detour route of the highway. The Pennsylvania proposes to relocate a portion of its line so as to replace its Panhandle division tunnel No. 4 with an open cut, thereby abolishing the existing crossing above grade, and to construct a marginal highway in lieu of a portion of the state highway so as to eliminate the necessity for the construction of any new highway-railroad crossing. Cost of constructing the marginal highway is estimated at \$27,810, and cost of constructing the proposed temporary highway at \$4,000.

UNION PACIFIC.—This road has awarded a contract, amounting to more than \$50,000, to the McNeil Construction Company, Los Angeles, Cal., for the construction of a building for servicing locomotives and the necessary facilities for fueling, watering and sanding, at San Bernardino, Cal.

Railway Officers

FINANCIAL, LEGAL AND ACCOUNTING

Lawrence H. Brannigan has been appointed assistant tax agent of the Central of New Jersey, with headquarters at Jersey City, N. J.

Eugene L. Kolbenheyer has been appointed assistant treasurer of the New York, New Haven & Hartford, with headquarters at Boston, Mass., succeeding the late **Arthur William Johnson**, whose death was reported in the *Railway Age* of October 23. Mr. Kolbenheyer has also been appointed treasurer of the New England Transportation Company and of the Boston & Providence. He was born on September 5, 1900, and attended the Vanness Accounting School at New Haven, Conn. He entered railway service as an office boy in the accounting department of the New York, New Haven & Hartford. Six months later Mr. Kolbenheyer was transferred to the treasurer's office, holding various positions in that department until 1938, when he became cashier. He served in that position until his recent appointment as assistant treasurer at Boston.

John R. Chapman, whose promotion to general auditor of the Minneapolis, St. Paul & Sault Ste. Marie (Soo Line), and of the Duluth, South Shore & Atlantic, with headquarters at Minneapolis, Minn., was reported in the *Railway Age* of November 6, was born at Winnipeg, Canada, on September 19, 1888, and entered railway service on

July 1, 1913, as a clerk of the auditor's office at Minneapolis. He was advanced to chief clerk of the auditor of disbursements on October 1, 1915, remaining in that capacity until June 1, 1922, except for a short period during which he served as a lieutenant in the U. S. Army. In 1922, Mr. Chapman was promoted to auditor of disbursements of the Soo Line and ten years later took over similar duties for the D. S. S. & A. On June 1, 1936, he was advanced to assistant comptroller of both roads, holding that position until his new appointment, effective November 1.

James B. Donnelly, whose promotion to comptroller of the Minneapolis, St. Paul & Sault Ste. Marie, and of the Duluth, South Shore & Atlantic, with headquarters at Minneapolis, Minn., was reported in the *Railway Age* of November 6, was born at Edinburgh, Scotland, on January 29, 1883, and entered railway service in 1899 as a messenger of the freight office of the Chicago, Rock Island & Gulf (now part of the Chicago, Rock Island & Pacific), at Fort Worth, Tex., serving in various capacities until 1912 when he went with the Kansas



James B. Donnelly

City, Mexico & Orient (now part of the Atchison, Topeka & Santa Fe), as a stores clerk at Sweetwater, Tex. Mr. Donnelly served in various positions on that road until 1919 when he was promoted to valuation accountant, with headquarters at Wichita, Kan. In 1920 he went with the Soo Line as chief clerk of the auditor of capital expenditures at Minneapolis, being promoted to auditor of capital expenditures on June 16, 1922. On June 1, 1936, he was advanced to auditor of disbursements of the Soo Line and of the D. S. S. & A., holding that position until his new appointment.

TRAFFIC

J. P. Donahue, ticket agent of the Illinois Terminal at St. Louis, Mo., has been promoted to assistant general passenger agent, with headquarters at Springfield, Ill.

J. J. Galligan and **W. H. Leh** have been appointed assistant general freight agents of the Lehigh Valley, with headquarters at New York.

E. J. Larson, manager of the general freight office of the Southern Pacific at Los

Angeles, Cal., has been promoted to assistant general freight agent, with headquarters at Portland, Ore.

C. J. Restall has been appointed general agent, freight department, of the Canadian National-Grand Trunk, with headquarters at Memphis, Tenn. He succeeds **W. T. Page**, who has retired under pension regulations.

C. E. Lennon, general freight and passenger agent, and general claim agent of the Texas Electric, has been promoted to traffic manager, with headquarters as before at Dallas, Tex. **A. P. Smith**, assistant general freight agent at Dallas, has been advanced to general freight agent, with the same headquarters, succeeding Mr. Lennon, and **H. C. McIntosh**, assistant general passenger agent, has been promoted to general passenger agent, with headquarters as before at Dallas, also succeeding Mr. Lennon.

OPERATING

R. J. Barnes has been appointed assistant trainmaster, Buffalo division, of the New York Central.

W. M. Hale, stations supervisor of the Illinois Central, with headquarters at Chicago, has been appointed superintendent of stations, a change of title.

T. M. Spence, division superintendent of the Southern Pacific Lines in Texas and Louisiana at Austin, Texas, has been promoted to acting assistant general manager, succeeding **B. S. Hollimon** whose death at Houston on November 3 is reported elsewhere in the columns.

E. W. Torian, trainmaster of the Lafayette division of the Southern Pacific Lines in Texas & Louisiana at Lafayette, La., has been promoted to assistant superintendent, with the same headquarters. **J. E. Slaughter** has been appointed trainmaster of the Lafayette division, succeeding Mr. Torian.

J. A. Dussault, assistant superintendent of the North Bay division of the Canadian Pacific at North Bay, Ont., has been transferred to the Montreal Terminals division, with headquarters at Montreal, Que., succeeding **J. O. Fortier**, who has been transferred to the Smith's Falls division, with headquarters at Ottawa, Ont., succeeding **W. L. Wilson**, transferred.

J. W. Treadwell, assistant superintendent of the Colorado division of the Missouri Pacific at Pueblo, Colo., has been promoted to superintendent of the Louisiana-Little Rock divisions, with headquarters at Monroe, La., succeeding **J. S. Bassett**, who has been granted a leave of absence due to illness. **J. L. White**, roadmaster of the Colorado division, has been advanced to assistant superintendent, replacing Mr. Treadwell.

Earl O. Dunn, trainmaster of the Grand Trunk Western (part of the Canadian National, at Durand, Mich., has been appointed superintendent of the Detroit & Toledo Shore Line (owned jointly by the Grand Trunk Western and the New York, Chicago & St. Louis), with headquarters at Lang,

Ohio. **H. A. Sanders**, chief clerk of the general superintendent of the G. T. W. at Detroit, Mich., has been advanced to trainmaster, with headquarters at Durand, succeeding Mr. Dunn.

R. M. Vest, trainmaster of the Southern Pacific at Tucson, Ariz., has been promoted to terminal trainmaster, with headquarters at Yuma, Ariz. **M. R. Harrington**, assistant trainmaster at San Jose, Cal., has been advanced to trainmaster, with headquarters at Yuma, succeeding **J. C. Slade**, who has been transferred to Tucson, replacing Mr. Vest. **W. D. Lamprecht**, trainmaster at Watson Junction, Cal., has been transferred to San Francisco, Cal., replacing **J. M. Cardwell**, deceased, and **Wayne Mace**, trainmaster at Mojave, Cal., has been transferred to Watson Junction, succeeding Mr. Lamprecht. **R. R. Robinson** has been appointed trainmaster at Mojave, relieving Mr. Mace.

ENGINEERING & SIGNALING

F. A. Williams, assistant supervisor of work equipment of the Chicago, Rock Island & Pacific, has been appointed acting supervisor of work equipment, with headquarters as before at Chicago, succeeding **L. J. Turner**, who has been granted a leave of absence due to illness.

G. R. Uitts, assistant division engineer of the Pennsylvania at Ft. Wayne, Ind., has been promoted to division engineer of the Indianapolis division, with headquarters at Indianapolis, Ind., succeeding **R. W. Speidel**, who has been granted leave of absence for military service with the 717th Railway Operating Battalion.

Roy P. Hart, bridge engineer of the Missouri Pacific has been promoted to assistant chief engineer, with headquarters as before at St. Louis, Mo., succeeding **Samuel L. Wonson**, whose death on October 1 was reported in the *Railway Age* of October 9. **J. R. Showalter**, assistant en-



Roy P. Hart

gineer at St. Louis, has been advanced to bridge engineer, with the same headquarters, replacing Mr. Hart.

Mr. Hart was born at Springfield, Mo., on February 14, 1892, and graduated in civil engineering from the University of Missouri in June, 1913. He entered railway service

with the Missouri Pacific at Omaha, Neb., on June 7, 1913, as timekeeper for a system steel erection gang, later serving as assistant foreman and inspector on various bridge construction projects and as a draftsman, estimator and designer in the bridge department at St. Louis. In November, 1919, he was promoted to chief draftsman and in February, 1931, he was advanced to assistant engineer. In the fall of 1938 he was advanced to assistant bridge engineer, and in February, 1941, he was promoted to the position he held at the time of his new appointment.

Paul Hamilton, whose retirement as district engineer of the New York Central (Big Four), with headquarters at Cincinnati, Ohio, was reported in the *Railway Age* of November 6, was born at Kingston, Ind., on October 5, 1873, and graduated from the University of Michigan in 1896. He entered railway service in 1900 as an assistant engineer of the Cleveland, Cincinnati, Chicago & St. Louis (Big Four, now part of the New York Central), at Springfield, Ohio, being transferred to Cincinnati in the same year. In 1902 he was advanced to supervisor of track, with headquarters at Indianapolis, Ind., and in the same year he was promoted to engineer maintenance of way of the Cairo division, with headquarters at Carmel, Ill. One year later he was transferred to the Cincinnati-Sandusky division, and in 1912 to the Cleveland-Indianapolis division, with headquarters at Galion, Ohio. In the latter year Mr. Hamilton was promoted to engineer of track and roadway at Cincinnati, and in 1923 he was advanced to assistant chief engineer of the Big Four. On August 1, 1940, he was appointed to the position he held at the time of his retirement, effective November 1.

SPECIAL

Dr. Harry R. Purdy, assistant director of the U. S. Board of Investigation and Research at Washington, D. C., has been appointed assistant director of the recently-created department of research of the Missouri Pacific, with headquarters at St. Louis, Mo.

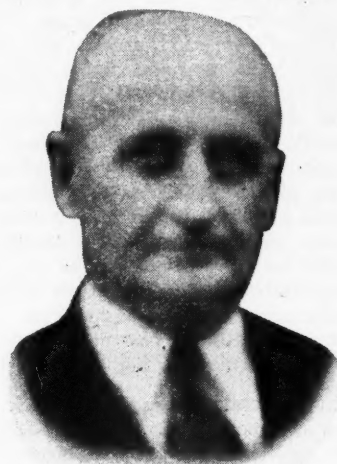
Oscar Ingels, news editor of the Bureau of News of the Southern Pacific, has been promoted to manager of the Bureau of News, with headquarters as before at San Francisco, Cal., succeeding **Lindsay Campbell**, whose death on September 13 was reported in the *Railway Age* of October 2.

Allan M. Short, who recently resigned from the staff of the United States Bureau of Mines at Salt Lake City, Utah, has been appointed mineral technologist of the Missouri Pacific, with headquarters at St. Louis, Mo., succeeding **W. M. Weigel**, whose death on March 26 was reported in the *Railway Age* of April 10.

PURCHASES AND STORES

Stanley R. Proffitt, whose promotion to purchasing agent of the Western Pacific, with headquarters at San Francisco, Cal., was reported in the *Railway Age* of October 23, was born at Raymond, Kan., in 1882, and attended Missouri State College, Spring-

field, Mo. He entered railway service while attending school as a section laborer of the Atchison, Topeka & Santa Fe, and in 1902 he went with the St. Louis-San Francisco (Frisco), as a clerk of the superintendent of transportation's office, later serving as chief clerk of the superintendent of shops and the chief electrician. In July, 1909, Mr. Proffitt went with the Western Pacific



Stanley R. Proffitt

where he was appointed to the dual position of chief clerk of the master mechanic and of the storekeeper, with headquarters at San Francisco. Mr. Proffitt later served as chief clerk of the general storekeeper and was then promoted to chief clerk of the purchasing department, holding that position until his new appointment.

OBITUARY

Russell G. East, general agricultural agent of the Pennsylvania, with headquarters at Richmond, Ind., died at his home in that city on November 3.

Edward B. Boyd, who retired in 1937 as chairman of the Western Trunk Line Committee, with headquarters at Chicago, died at Minneapolis, Minn., on November 2.

Edgar Fleming, assistant treasurer of the Canadian National with headquarters at Montreal, Que., died on November 2. He was 59 years old.

L. Brousseau, engineer maintenance of way of the Canadian National, with headquarters at Toronto, Ont., died on October 20 after an extended illness.

Arthur B. Childs, chief mechanical engineer of the Northern Pacific, with headquarters at St. Paul, Minn., died at his home in Minneapolis, Minn., on November 4.

A. D. Mims, vice president and general manager of the Southern Pacific Lines in Texas and Louisiana, with headquarters at Houston, Texas, died suddenly at Houston on October 30.

B. S. Hollimon, assistant general manager of the Southern Pacific Lines in Texas and Louisiana, with headquarters at Houston, died suddenly at Houston on November 3.